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ABSTRACT

This Connector's Guide contains a set of seven resources for administrators, counselors, teachers, and employers that offers strategies and techniques for effecting successful youth transitions. "Introduction to Connections" presents program coordinators with an overview of the components in the Connections package and describes their purposes, benefits, and uses. "An Action Guide to Youth Employment" presents recommendations for effecting positive youth transitions from school to work, strategies for implementing the recommendations, and research findings and data that support the recommendations. "Assessing and Planning with Students" outlines the overall processes for assessing students' needs, skills, attitudes, and interests and in developing individual career plans. It provides a number of suggestions for using individualized career development plans, computerized career guidance systems, and community resources in career planning. "Involving the Community in Transitions" outlines steps in planning and implementing school-community linkages and the competencies needed by school-community coordinators. "Placing Students in Jobs" provides an overview of steps needed in developing, implementing, and evaluating placement programs. "Following Students into the World of Work" focuses on steps in planning follow-up studies, data collection, and reporting, as well as developing and delivering followthrough services. "Resources for Connections" identifies materials that support the Connections resources. An annotated bibliography lists 150 print, audiovisual, and computer resources. Annotations provide type of resource, intended users, a brief overview of content, and pagination. The names and addresses are also provided of 115 organizations and associations, most of which are national in scope, which provide services relevant to youth in transition. It also includes descriptions of 13 databases and 4 electronic services helpful to institutions serving youth in transition. (YLB)

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The Connector's Guide

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FOREWORD

Current labor market trends suggest that improving the school and work transitions of youth is a national priority. Over 25 percent of our nation's youth drop out of high school before they graduate. In large cities, the dropout rates are even higher at approximately 50 percent. Of those who do graduate, about 30 percent make high school graduation the end of their formal education and the starting point for work. These dropouts and recent high school graduates represent an entry-level labor pool that is changing in composition as we move toward the year 2000.

In the next 15 years, the proportion of the labor force in the 16 to 24-year age range is predicted to decline from 30 percent to 16 percent, and the youth who are in this age range are likely to be the kinds that employers have been able to overlook in the past—poorly motivated, lacking basic skills, and unprepared for the responsibilities and demands of work.

For students, their parents, the community, and society as a whole, the costs of inadequately prepared high school graduates and disconnected youth are high, relating to problems that include poverty, alcohol and drug abuse, pregnancy, single parenting, crime, and unemployment. For employers, the costs can make it impossible for their firms to compete in today's world markets—a competition that requires firms to have competent, skilled workers who will be productive and easy to train.

Clearly, schools must become more effective in preparing students to succeed in work that is appropriate and satisfying to them and their employers. And, they must enlist the support, expertise, and wisdom of business, industry, and the community to help them in preparing youth for school and work transitions.

The National Center for Research in Vocational Education has over 20 years of research, development, implementation, and dissemination experience directed at connecting students to work. The CONNECTIONS package, which represents a synthesis of significant work on education and employment, presents a coordinated set of resources to help school administrators, counselors, teachers, and even employers help students in their school and work transitions. CONNECTIONS includes a connector's resource guide, classroom materials including a videotape, a Credentials for Employment document and career folder, and two career information guidebooks. Two orientation videotapes are also included in the package: a 30-minute documentary entitled "A National Perspective on Youth Employment," and a 10-minute orientation to the package topic and components entitled "Introducing Connections."

Resources

The Connector's Guide contains a set of 7 resources for administrators, counselors, teachers, and employers that offer strategies and techniques for effecting successful youth transitions. Individual resources in this looseleaf *Connector's Guide* are as follows:

- *Introduction to Connections* presents program coordinators with the background information, philosophy, components, and use of the CONNECTIONS materials.

- *An Action Guide to Youth Employment* presents recommendations for effecting positive youth transitions from school to work, strategies for implementing the recommendations, and research findings and data that support the recommendations.
- *Assessing and Planning with Students* outlines the overall processes for assessing students' needs, skills, attitudes, and interests and in developing individual career plans.
- *Involving the Community in Transitions* outlines steps in planning and implementing school-community linkages and the competencies needed by school-community coordinators.
- *Placing Students in Jobs* provides an overview of steps needed in developing, implementing, and evaluating placement programs.
- *Following Students into the World of Work* focuses on steps in planning follow-up studies, data collection, and reporting, as well as developing and delivering follow-through services.
- *Resources for Connections* identifies print materials that support the CONNECTIONS resources.

Curriculum Materials

The Employer's Choice is a research-based, multimedia set of instructional materials to prepare students for job market success. Individual components of *The Employer's Choice* are as follows:

- *Priorities That Count* uses data from completed employer questionnaires to illustrate how employers are influenced to hire and retain workers. Through selected activities, students are led to develop a realistic view of employer standards and to make plans for acquiring the skills employers want.
- *The Job Search* uses a videotape of simulated job interviews together with job applications to present facts about employers' responses to applicants at each stage of the job hiring process. By assessing the videotaped interviews and by role-playing the job application and interview process, students learn to perfect their job search techniques.
- *On the Job* uses a series of case studies to present the real-life situations and experiences young people encounter in getting a job, becoming an insider, training at the work site, and leaving a job. As students examine the consequences of various behaviors and attitudes, they begin to develop their own strategies for navigating the job market.
- *Resource Manual* contains an Instructor's Guide that provides strategies for implementing *The Employer's Choice* materials and a set of black line masters for all consumable student materials.

Work Skills is a set of competency-based instructional materials written for low-level readers, that prepares students with specific job search and job keeping skills. The components of *Work Skills* are as follows:

- *Orientation to the World of Work* provides practical, thought-provoking activities to help students analyze, plan, research, and decide why and how they will work.
- *Job Search Skills* provides detailed instruction for developing the skills necessary to prepare resumes, find job leads, complete job applications, interview for jobs, and assess job offers.
- *Work Maturity Skills* provides detailed instructions for developing the competencies employers want their employees to have as they work on the job.
- *Resource Manual* contains an Instructor's Guide that provides strategies for implementing the *Work Skills* materials and a set of black line masters for all consumable student worksheets.

Career Passports is a concise, systematic process for developing experience-based resumes. The components are as follows:

- *Student Workbook* contains worksheets for recording personal data, work and non-work experience; the skills, knowledge, and attitudes gained through these experiences, and other information that would be useful to employers or college admissions persons.
- *Leader's Guide* outlines the rationale, purpose, and step-by-step process for guiding students in developing Career Passports.

Documentation

Credentials for Employment is a certified record of the student's aptitudes, achievements, job skills, and work habits and behaviors. Completed by teachers, guidance counselors, employers, and community people, this document serves as evidence of the student's preparedness for work.

Supportive Materials

The *Career Portfolio* is a folder to hold documents that reflect the student's qualifications for work. A list of key documents for students to assemble appears on the front of the folder.

Additional Resources

Career Information in the Classroom is an inservice training resource designed to help K-12 teachers use the *Occupational Outlook Handbook* to infuse career information into their classroom curriculum.

Dignity in the Workplace: Labor Studies Curriculum Guide for Vocational Educators presents background information and a variety of activities for infusing labor studies into the curriculum. Student materials include 7 modules and numerous fact sheets on unions, industries, and the economy.

The National Center wishes to acknowledge the leadership provided to this effort by Dr. Robert E. Taylor, recently retired Executive Director. Appreciation is also extended to the

National Institute of Education for funding much of the research and effort that has gone into *The Employer's Choice* materials, the Department of Labor for similar funding of *Work Skills* and the National Institute for Work and Learning for their development of the *Career Passport*.

Additional recognition and appreciation is afforded to the Office of Vocational and Adult Education for funding the synthesis effort that has made this package possible. The significant and comprehensive materials on the topic of youth transitions could not have been assembled and developed into usable package components without their support.

Special recognition is due the following National Center staff who played major individual roles in the development of the CONNECTIONS package: Richard J. Miguel, Associate Director of Applied Research and Development, and Robert D. Bhaerman, Project Director, for leadership and direction of the project; and Bettina A. Lankard, Program Associate, for synthesizing and developing the documents; Robert A. Gordon, Research Specialist, and Gary Dean, Graduate Research Associate, for their assistance in synthesizing information; and Jeanne Thomas, for word processing the documents. Appreciation is extended to the National Center editorial and media services personnel for editorial review, graphics, and production of the documents.

Chester K. Hansen
Acting Executive Director
The National Center for Research
in Vocational Education

EXECUTIVE SUMMARY

The *Connector's Guide* contains a synthesis of relevant information, research findings, and practices for administrators, teachers, guidance counselors, and employers to draw upon as they work to help youth in their school and work transitions.

The *Introduction to Connections* provides an overview of the package components and presents recommendations for the individual and interrelated use of the components.

The *Action Guide to Youth Employment* presents a streamlined set of recommendations to guide school personnel and employers in their efforts to prepare students for successful employment. All of the recommendations are based on research evolving from a 4-year multidisciplinary research project on education and employment that was directed by John H. Bishop at the National Center for Research in Vocational Education. Following each recommendation in the guide are the relevant facts that serve as a basis for that recommendation.

The remaining resource guides that address the topics of assessment and planning, linkages, placement, follow-up and follow-through present a synthesis of each of the topic issues and of the strategies and practices that have been used successfully to implement the processes.

**INTRODUCTION TO CONNECTIONS:
SCHOOL AND WORK TRANSITIONS**

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INTRODUCTION TO CONNECTIONS: SCHOOL AND WORK TRANSITIONS

Current and predicted labor market trends tell us it is time that all members of our society concern themselves with the school and work transitions of youth.

- High schools face a student dropout rate of 30-50 percent, and this rate is rising, particularly in urban areas.
- Employers face a diminishing population of young people who compose the entry-level labor pool, a pool that is increasingly represented by the kinds of youth employers have been able to overlook in the past—poorly motivated, lacking basic skills and unaware of the habits and behaviors required for work.
- Students, especially the kinds just described, don't know how to find or keep jobs. Therefore, a great many of them face years of sporadic or unsuccessful employment.
- The community as a whole faces the increasing costs of problems associated with disconnected youth, problems that include poverty, alcohol and drug abuse, pregnancy, crime and unemployment. These problems create an emotional as well as financial drain on society.

If we are to avoid or diminish the occurrence of these problems, schools, with the help of employers and the community, must act to prepare youth for their transitions from school to work or to further education that will prepare them for work.

The CONNECTIONS: SCHOOL AND WORK TRANSITIONS package was developed to answer this call. It contains a set of resources to help administrators and other decision makers establish policies, practices, and programs that facilitate good youth transitions; a set of curriculum materials for teachers to use in preparing youth for transitions; and documentation students can assemble to communicate their achievements and qualifications to employers.

Resources to Facilitate Youth Transitions

The set of seven resources contained in this *Connector's Guide* are for administrators, teachers, guidance counselors, and employers. This "Introduction to Connections" presents an overview of the components in the CONNECTIONS package and describes their purposes, benefits, and uses. The next five resources in this guide present recommendations and strategies for improving efforts in the areas of assessment and planning, employability development, school-community linkages, placement, and follow-up and follow-through. The final resource contains a reference list of materials that support and supplement the CONNECTIONS package.

The information in each resource was synthesized from numerous articles, books, reports, and other documents written on the topics. By using these concise and up-to-date resources, program coordinators will be able to use the time they would have spent researching each topic on actual program improvement.

Several videotapes on the topic of youth transitions are available in the CONNECTIONS package. "Introducing Connections," a 10-minute videotape, presents an overview of the youth transition issue and describes how the components of CONNECTIONS help the school and community prepare students for their school and work transitions. "National Perspectives on Youth Employment," a 45-minute videotape documentary on education and employment, presents commentary by employers, psychologists, teachers, students, counselors, and researchers who discuss the problems affecting youth employment and how youth, schools, and employers can address these problems.

Other resources available in CONNECTIONS: SCHOOL AND WORK TRANSITIONS are *Career Information in the Classroom*, an inservice training manual on using the *Occupational Outlook Handbook*, and *Dignity in the Workplace: A Labor Studies Curriculum for Vocational Educators*. Each of these resources presents strategies for infusing relevant occupational information into the existing classroom curriculum.

Curriculum to Prepare Students for Transitions

The curriculum component of CONNECTIONS focuses on the development of employability and job search skills, skills that are critical to getting hired and staying employed. Although specialized skills increase a person's marketability, they are rarely prerequisites for entry-level jobs. Job search and employability skills on the other hand are required for all jobs. They are the kinds of skills that are highly transferable to a variety of work and life situations and therefore increase a person's occupational adaptability. The three sets of classroom materials in CONNECTIONS that address employability are *The Employer's Choice*, *Work Skills*, and *Career Passports*. Each offers a unique approach to employability development.

The Employer's Choice is a research-based, multimedia set of instructional materials designed to prepare students for job market success. Directed to high school students, these materials present current employer standards and practices and outline strategies and activities to help students develop the skills they need to meet those standards. Through various observations and activities, students are able to see themselves and their actions through the eyes of employers and co-workers, and thereby make more informed decisions about how they will present themselves when they seek and work in jobs.

Work Skills is a set of competency-based instructional materials that prepares students with specific job search and job keeping skills. These materials can be used with special students who have low reading abilities and with students who need supervision along with very specific instructions for developing the competencies required to find and keep jobs. Although *Work Skills*' prime use is with students who have limited reading abilities, it can also be used as a supplement to *The Employer's Choice*.

Career Passport presents a systematic process for developing an experienced-based resume. This process can be used in any class on resume writing or it can be used to supplement *The Employer's Choice* curriculum that deals with resume writing.

Students' Documentations of Achievements and Qualifications for Transitions

Students preparing for school and work transitions must be able to show documentation of the skills and competencies they have acquired through their home, school, and work experiences.

Employers as well as college and postsecondary administrators, base their selections largely upon information they receive from applicants. They have little time to do more than check the applicants' references for more information. Therefore, students who want to be accepted into work or further schooling have an advantage if they provide detailed, relevant information about themselves. The employment file presented in CONNECTIONS provides a method of acquiring and assembling this documentation.

Credentials for Employment is a record book completed by teachers, guidance counselors, employers, and community people upon the student's request. Each person recording information completes one page of the *Credentials for Employment* by writing his or her name, title, company or school, address, and telephone number at the top of the page; listing information about the student's aptitudes, achievements, job skills, and work habits and behaviors under the appropriate heading; and signing and dating the page on the bottom two lines. The purpose of this document is to provide the student with a verified record of employment credentials—information employers will be able to use in deciding whom to hire. Each student is responsible for maintaining and updating his or her *Credentials for Employment*. However, the document should be filed with other employment documents in the student's *Career Portfolio*.

Career Portfolio is a folder for holding documents that reflect employment qualifications. A list of key documents students are to assemble in their *Career Portfolios* appears on the front of the folder. These documents include a Career Passport, or resume, a sample completed job application, a transcript of grades and/or other achievements, competency records, letters of recommendation, and *Credentials for Employment*. The *Career Portfolios* should be stored in the students' school files and made accessible to them.

Summary

Table 1 describes the individual components, table 2 offers implementation information, and figure 1 suggests packaging options.

TABLE 1: COMPONENT DESCRIPTIONS
CONNECTIONS: SCHOOL AND WORK TRANSITIONS

Resources to Facilitate Youth Transitions	Curriculum to Prepare Students for Transitions	Students' Documentations of Achievements and Qualifications for Transitions
<p>The Connector's Guide</p> <p>A set of seven resources to help administrators, counselors, teachers, and employers establish policies, practices, and programs that prepare youth for successful school and work transitions.</p> <p>Introducing Connections</p> <p>A 10-minute videotape that presents a overview of the youth transition issue and describes the CONNECTIONS components and their uses.</p> <p>National Perspective on Youth Employment</p> <p>A 45-minute videotape that presents a documentary on the issues, problems, and challenges associated with youth employment.</p> <p>Career Information in the Classroom</p> <p>An inservice training manual on using the Occupational Outlook Handbook.</p> <p>Dignity in the Workplace: A Labor Studies Curriculum for Vocational Educators</p> <p>Guidebooks for infusing labor studies information into the curriculum.</p>	<p>The Employer's Choice</p> <p>A research-based, multimedia set of instructional materials to prepare students for job market success.</p> <p>Work Skills</p> <p>A set of competency-based instructional materials that prepares students with specific job search and job keeping skills. Designed for students with low reading ability.</p> <p>Career Passports</p> <p>A concise, systematic process for developing an experienced-based resume</p>	<p>Credentials for Employment</p> <p>A certified record of student's aptitudes, achievements, job skills, and work habits and behaviors.</p> <p>Career Portfolio</p> <p>A folder to hold documents that reflect the student's qualifications for work.</p> <p>A list of key documents to include appears on the front of the folder.</p>

TABLE 2: IMPLEMENTATION INFORMATION
CONNECTIONS: SCHOOL AND WORK TRANSITIONS

CONNECTIONS is a coordinated set of resources to assist administrators, teachers, and counselors in preparing students for school and work transitions. The resources include guidebooks for planning and carrying out transitions programs. Student materials help students meet employer standards in the job search and on the job by developing their job search and employability skills.

CONNECTOR'S GUIDE—A set of seven resources for administrators, counselors, teachers and employers that offer strategies and techniques for effecting successful youth transitions.

	Target Audiences	Purpose	Format	Curriculum	Est. Time
INTRODUCTION TO CONNECTIONS	Teachers, Guidance Counselors, Administrators, and Employers	To help users implement the <i>Connections</i> materials	Guidebook	N/A	N/A
AN ACTION GUIDE TO YOUTH EMPLOYMENT	Teachers, Guidance Counselors, Administrators, and Employers	To help users learn what they can do to prepare students to make successful school and work transitions	Guidebook	N/A	N/A
ASSESSING AND PLANNING WITH STUDENTS	Teachers, Counselors, and Administrators	To help users design assessment/planning programs	Guidebook	N/A	N/A
INVOLVING THE COMMUNITY IN TRANSITIONS	Administrators, Teachers, and Counselors	To help users develop parent/family/community/group/youth organization linkages	Guidebook	N/A	N/A
PLACING STUDENTS IN JOBS	Administrators, Teachers, and Counselors	To help users design their placement programs	Guidebook	N/A	N/A

Benefits	Outcomes
Users will be able to understand the content and use of <i>Connections</i> materials.	Users learn how <i>Connections</i> can help them facilitate youth transitions.
Users will gain new insights into their role in youth employment as they examine the research data and findings relating to students' in-school preparation for employment and to employer hiring and retention standards.	Employers and school personnel learn which factors contributed to youth unemployment and consider recommendations on ways to initiate and encourage employability development in the schools and cooperation between the schools and hiring employers.
Users will have an array of suggestions for conducting both formal and informal assessments and career planning activities.	<p>Users learn to . . .</p> <ul style="list-style-type: none"> • use school records, tests, and information as part of assessment; • identify characteristics of a good test; • select tests; interpret and communicate test results; • use a variety of assessment resources; and • design individualized career development plans with students.
Users will have numerous suggested "guideposts" for planning school-community involvement programs.	<p>Users learn to . . .</p> <ul style="list-style-type: none"> • recognize the benefits of school-community involvement, • identify the major types of school-community involvement programs, • identify the range of resources available, • develop facilitating strategies, • develop action plans, and • evaluate school-community activities.
Users will have lists of steps and procedures in developing and implementing placement programs.	<p>Users learn to . . .</p> <ul style="list-style-type: none"> • plan and promote a placement program, • participate in job development, • determine the need for various support services, • operate a placement program, and • monitor and evaluate program effectiveness.

CONNECTOR'S GUIDE—(continued)

	Target Audiences	Purpose	Format	Curriculum	Est. Time
FOLLOWING STUDENTS INTO THE WORLD OF WORK	Administrators, Teachers, and Counselors	To help users design follow-up studies and follow-through services	Guidebook	N/A	N/A
RESOURCES FOR CONNECTIONS	Administrators, Counselors, and Teachers	To identify materials that support and supplement the resources in <i>Connections</i>	Guidebook	N/A	N/A

SUPPORT MEDIA—Two videocassettes that provide information about the youth transition issue to motivate administrators, counselors, teachers, and community people to support use of the *Connections* package.

INTRODUCING CONNECTIONS	Administrators, Counselors, and Teachers	To present ways in which components of the <i>Connections</i> package can help the school and community prepare students for their school and work transitions.	Videocassette	N/A	N/A
A NATIONAL PERSPECTIVE ON YOUTH EMPLOYMENT	Administrators, School Board Members, Parents	To present commentary and research findings resulting from a 4-year study on education and employment, along with recommendations of what students, schools, and employers can do to reduce employment problems.	Videocassette	N/A	N/A

OTHER RESOURCES—Two career information resources for teachers to use in the classroom.

CAREER INFORMATION IN THE CLASSROOM	Teachers	To help teachers use <i>Occupational Outlook Handbook</i>	Workshop Guide	Vocational, Career Ed., Guidance	20-30 hours
DIGNITY IN THE WORKPLACE: A LABOR STUDIES CURRICULUM FOR VOCATIONAL EDUCATORS	Teachers and Counselors; Students	To help teachers infuse labor studies into the classroom and counselors use the information with students	Curriculum Guide with accompanying student guide	Vocational, Guidance	Optional

Table 2 *Continued*

Benefits	Outcomes
Users will have numerous steps in planning follow-up studies, data collection, data reporting—as well as developing and delivering follow-through services.	<p>Users learn to . . .</p> <ul style="list-style-type: none"> ● determine who should be the target population of a follow-up study and who should receive follow-through services, ● determine how frequently to conduct such studies and provide such services, ● determine how to collect follow-up data and what follow-through services are needed, ● determine how to implement follow-up and follow-through programs, and ● evaluate follow-up and follow-through programs.
Users will have a comprehensive list of resources available on the topics addressed in youth transitions.	Users learn which resources will assist them in their transition efforts.
Viewers will learn the focus of each component of the <i>Connections</i> package and understand how the components can be used to improve the school and work transitions of their students.	Viewers use the <i>Connections</i> materials that are most aptly suited to their program efforts and to the students they serve.
Viewers will learn the benefits and drawbacks of various teacher and employer practices and strategies for improving their current program efforts.	Viewers know which strategies are most successful in effecting good school and work transitions.
Users will be able to get maximum use from the <i>Occupational Outlook Handbook</i> .	Students use the <i>Occupational Outlook Handbook</i> as a source of career information.
Users will have knowledge of and insights into organized labor's history as well as critical labor issues of the day.	<p>Users learn to . . .</p> <ul style="list-style-type: none"> ● understand the history of labor unions as well as the structure and functioning of modern unions, ● recognize rights of workers, ● appreciate labor's role in supporting public education, and ● be aware of the many activities in which labor unions engage.

CURRICULUM

THE EMPLOYER'S CHOICE—A research-based, multimedia set of instructional materials to prepare students for job market success.

	Target Audiences	Purpose	Format	Curriculum	Est Time.
THE EMPLOYER'S CHOICE: PRIORITIES THAT COUNT	High School Students	To help students develop a realistic view of employer hiring and retention standards	Instructor Guide and Student Guide	Vocational, Business, English, Career Ed., Guidance, Cooperative Education, Work/Study	5 hours
THE EMPLOYER'S CHOICE: IN THE JOB SEARCH	High School Students	To help students apply and interview for jobs in ways that meet employer's expectations	Instructor Guide and videotape "What Works in the Job Search"	Vocational, Business, English, Career Ed., Guidance, Cooperative Education, Work/Study	14 hours
THE EMPLOYER'S CHOICE: WHAT WORKS ON THE JOB	High School Students	To help students learn successful ways to find, keep, and leave jobs.	Instructor Guide and Student Guide	Vocational, Business, English, Career Ed., Guidance, Cooperative Education, Work/Study	10 hours

NOTE: The Instructor's Guide and black-line masters for the 3 components of *The Employer's Choice* are in *The Employer's Choice Resource Manual*.

Table 2 *Continued*

Benefits	Outcomes
Students will be encouraged to find that they already have some skills employers want, that they can balance the scales to offset the effect of negative information by presenting positive information, and that having too many negative qualities usually results in unemployment.	Students learn which factors influence their employability and develop plans for acquiring the qualities employers want.
Students will be able to approach the job search with confidence, knowing that they have prepared to meet employers' expectations.	Students learn to prepare resumes, fill out job applications, and interview for jobs. They also set goals for improving their education, training, and work experience records along with their attitudes and behaviors.
Students will be able to see themselves and their actions through the eyes of employers and co-workers and, thereby, make more informed decisions about how they will navigate the job market.	Students learn the consequences of various behaviors and attitudes demonstrated by young workers in the job market and practice positive ways to perform in job situations like the following: getting a job; become an insider; training at the work-site; and leaving a job.

WORK SKILLS—A set of competency-based instructional modules that prepare students with specific job search and job keeping skills.

	Target Audiences	Purpose	Format	Curriculum	Est Time Max Time
WORK SKILLS: ORIENTATION TO THE WORLD OF WORK	High School Students	To help students analyze, plan, research, and decide why and how they will work	Instructor Guide and 1 Student Guide	Vocational, Business, English, Career Education, Guidance (low reading level)	10-20 hours
WORK SKILLS: WORK MATURITY SKILLS	High School Students	To help students develop the competencies they need to retain jobs	Instructor Guide and 7 Student Modules	Vocational, Business, English, Career Education, Guidance (low reading level)	40 hours
WORK SKILLS: JOB SEARCH SKILLS	High School Students	To help students develop the specific compe- tencies they need to get jobs	Instructor Guide and 5 Student Modules	Vocational, Business, English, Career Education, Guidance (low reading level)	40 hours

NOTE: The Instructor's Guides and black-line masters for the 3 components of Work Skills are in the *Work Skills Resource Manual*.

Table 2 *Continued*

Benefits	Outcomes
Students will be able to make more informed career decisions and be able to set short-term and long-term goals that reflect their priorities.	Students learn to identify the personal benefits of working, match their needs and wants with the benefits various jobs offer, and use the decision-making process to make career decisions and set career goals.
Students will be able to meet employers' standards and will thereby experience greater success and satisfaction on the job.	<p>Students learn how to perform the steps required to . . .</p> <ul style="list-style-type: none"> ● present a positive image, ● exhibit positive work attitudes, ● practice good work habits, ● practice ethical behavior, ● communicate effectively, ● accept responsibility, and ● cooperate with others.
Students will be able to conduct the job search with skill, having mastered each of the steps that lead to competence and having that competence certified by the instructor.	<p>Students learn how to perform the steps required to . . .</p> <ul style="list-style-type: none"> ● prepare themselves to begin the job search, ● search for available jobs, ● apply for jobs, ● interview for jobs, and ● handle job offers.

DOCUMENTATION

CAREER PASSPORTS—A concise, systematic process for developing experienced-based resumes.

	Target Audiences	Purpose	Format	Curriculum	Est. Time Max. Time
CAREER PASSPORT	High School Students	To help students document their accomplishments, skills, competencies, etc., that make them marketable.	Student Workbook and Leader's Guide	Vocational Business, English, Career Ed., Guidance	5-10 hours

CAREER PORTFOLIO—An expandable folder to hold documents that reflect the student's qualifications for work.

CAREER PORTFOLIO	High School Students	To give students a checklist of the items to include and use on the job search	Folder	Vocational, Business, English, Career Ed., Guidance	N/A
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CREDENTIALS FOR EMPLOYMENT—A certified record of the student's aptitudes, achievements, job skills, and work habits and behaviors.

CREDENTIALS FOR EMPLOYMENT	High School Students	To enable students to compile a verified record of their aptitudes, achievements, job skills, work habits, and behaviors.	Booklet	Vocational, Business, English, Career Ed., Guidance	10-15 minutes per reference
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Table 2 *Continued*

Benefits	Outcomes
Students will have a detailed resume that shows transferable types of skills and abilities.	Students learn how to prepare experience-based resumes.
Students will have a list of items they should take with them in the job search and a place to store them.	Students have comprehensive information about themselves to present to employers. Employers have more facts upon which to base their hiring decision.
Students will enter the job search with information and recommendations that give evidence of their preparedness for work.	Employers can base their hiring decisions on facts that reflect job productivity, and applicants can present a verified record of their "Credentials for Employment."

CONNECTIONS ORDER FORM

Available by special purchase options or by individual item

	A	B	C	D
COORDINATOR'S RESOURCES				
• The Connector's Guide	1	1	1	1
• Introduction to Connector's videocassette	1	1	1	1
• Career Information in the Classroom	1	1		
• Dignity in the Workplace: A Labor Studies Curriculum Guide for Vocational Educators	1	1		
• Dignity in the Workplace: A Student's Guide to Labor Unions	1	1		
• National Perspective on Youth Employment (videocassette)	1	1		
EMPLOYER'S CHOICE				
• Resource Manual (instructor guide and black-line masters)	1	1	1	
• Priorities that Count (student book)	1	20	20	
• On the Job (student book)	1	20	20	
• What Works in the Job Search (videocassette)	1	1	1	
WORK SKILLS				
Resource Manual (instructor guide and black-line masters)	1	1		1
Orientation to the World of Work	1	10		10
Job Search Modules				
• Prepare for the Job Search	1	10		10
• Search for Available Jobs	1	10		10
• Apply for Jobs	1	10		10
• Interview for Jobs	1	10		10
• Handle Job Offers	1	10		10
Work Maturity Skills Modules				
• Present a Positive Image	1	10		10
• Exhibit Positive Work Attitudes	1	10		10
• Practice Good Work Habits	1	10		10
• Practice Ethical Behavior	1	10		10
• Communicate Effectively	1	10		10
• Accept Responsibility	1	10		10
• Cooperate with Others	1	10		10
CAREER PASSPORTS				
• Career Passport, Leader's Guide	1	1	1	
• Career Passport, Student Workbook	1	20	20	
EMPLOYMENT FILE				
• Credentials for Employment	1	40	20	20
• Career Portfolio	1	40	20	20
A. CONNECTIONS PROFESSIONAL SET —A complete set of material including one copy of each product from the resource package				
B. CONNECTIONS START-UP PROGRAM —Includes the professional set and quantities of coordinator materials plus student materials for one class in the Employer's Choice, one class in Work Skills, one class in Career Passports, and Employment File materials for all classes				
C. EMPLOYER'S CHOICE SAMPLER —All materials for conducting a short course or infusion unit on strategies for meeting employers' hiring and retention standards				
D. WORK SKILLS SAMPLER —All materials for conducting a competency-based instructional program on job search and retention for students with a low-reading level				

Figure 1. CONNECTIONS: School and Work Transitions--packaging options.

AN ACTION GUIDE TO YOUTH EMPLOYMENT

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Introduction

Purpose

An Action Guide to Youth Employment helps employers, teachers, guidance counselors, and administrators learn what they can do

to reduce high rates of youth unemployment and job turnover.

Outcomes

Employers and school personnel learn which factors contribute to youth unemployment and consider recommendations on ways

to initiate and encourage employability development in schools and cooperation between schools and hiring employers.

Benefit

Employers, teachers, counselors, and school administrators will gain new insights into their roles in youth employment as they exam-

ine the research data and findings related to students' in-school preparation for employment and to employer hiring and retention standards.

Users

An Action Guide to Youth Employment is for employers, teachers, guidance counselors,

and school administrators.

Background Facts

The information presented in this guidebook is a synthesis of research data and findings resulting from a 4-year multidisciplinary study of education and employment. Topics like employer hiring standards and practices, early labor market experiences of youth, on-the-job

training, part-time work during high school, and employer recruitment and selection strategies were the focus of some of these studies. The recommendations presented in this guidebook are based on that research.

Focus

The information in this guidebook contains—

- recommendations for effecting positive youth transitions from school to work,

- strategies for implementing the recommendations, and
- research findings and data that support the recommendations and strategies.

Content

There are three chapters in this guidebook:

- "Selecting the Right Person for the Job: Recommendations for Employers"
- "Helping Students Get Jobs: Recommendations for Teachers and Guidance

Counselors"

- "Promoting Employability Development: Recommendations for School Administrators"

Use

The primary use of this *Action Guide to Youth Employment* will be within the school system. The two chapters targeted to school personnel—teachers and guidance counselors, and school administrators—will be easily accessible to those people, since they function in the school setting. The section for employers, while of interest to school staff, should be shared with employers in the community. Possible ways to do this are through (1) school parent-teacher organization members, (2) the school placement office (if there is one), and (3) teachers, counselors, and other staff who

already have referral relationships with local employers.

School staff members could also write articles for local newspapers using the facts in this guidebook to draw community support and interest to problems related to youth employment. An awakening to factors that contribute to poor school and work transitions and the ramifications that poor transitions have upon the community may serve to activate community interest and support of programs designed to address those problems.

Overview

Most individuals knowledgeable about organizational and social structure in schools agree on five features of effective schools: strong instructional leadership, an orderly school climate, concentration on basic skills, high expectations, and frequent monitoring of the instructional process. However, to be truly effective, a school must prepare its students for work—whether it is work to acquire further education in a postsecondary school, work in the home, work in the business community, or work in government and public agencies.

A school that is committed to excellence must be prepared to meet the needs of all students—those who plan to attend college and

those who do not; those who plan to work in the home and those who plan to work in a business environment; those who plan to interact with many other persons (such as employers, co-workers, spouses, and friends) and those who plan to interact with only a few. Since the needs and plans of students are not only diverse but also constantly changing, a school that is committed to excellence must be prepared to address all areas of development, namely, those involving basic skills, occupational or job-related skills, and attitudes and behaviors. Students must begin acquiring these skills in high school, because for many of them high school will be their last opportunity to learn in a formal educational setting.

About 25 percent of our nation's high school students drop out of school before they graduate. Of those who do graduate, about 30 percent make high school the end of their formal education and the starting point for work. A recent study conducted by the Bureau of Labor Statistics revealed that the unemployment rate was 25 percent for all young people who graduated from high school the previous June and who were not enrolled in college. For black high school graduates in the study, the unemployment rate was even worse at 54 percent. The high school graduates who did find work typically remained in their first jobs no longer than 3-6 months.

These statistics support the views of many employers, who state that recent high school graduates are inadequately prepared for employment, have inadequate knowledge of the job market, and once hired, perform poorly on the job, are less productive, and are also more likely to be dissatisfied with job tasks and condi-

tions. If these students are to succeed in the job market, they must be led to see career preparation as their responsibility and motivated to take advantage of the opportunities they are afforded in their schools, homes, and communities. Clearly, schools must become more effective in preparing students to succeed in work that is appropriate and satisfying to them. The responsibility, however, does not rest solely with the academic community and its students. Business and industry must likewise become involved in shaping the people they will eventually employ and in structuring their own processes for hiring, training, and motivating their employees. The recommendations presented in this *Action Guide to Youth Employment* address the issue of what works in the employment arena—facts that have implications for employers and schools as well as for students. Employability development is everyone's job and the recommendations in this guide are intended to make that job easier.

Selecting the Right Person for the Job: Recommendations for Employers

Employers and employees alike agree on the need for wise hiring decisions. Employers want workers who will be productive and satisfied in their jobs. Job seekers want to be hired into jobs that meet their unique sets of preferences. Finding a good match between the job and the job seeker requires a complete and comprehensive exchange of information. Such an exchange can be accomplished with effective use of various assessment and selection techniques, but these hiring practices take time, effort, and knowledge.

A national survey of 3,500 employers conducted by the National Center for Research in Vocational Education revealed some interesting facts about employers' hiring practices. Employers fill their open positions quickly. The employers in the study filled 37 percent of their job openings within 1 week of starting their employee searches, 65 percent in less than 2 weeks, and 83.5 percent in less than a month. Although some firms devote more time than others to selecting new employees, the survey found that on the average firms devote fewer than 20 hours of staff time to recruiting, interviewing, and selecting for a vacancy, and that the typical employer reviews only 9 applications and interviews only 5 of the applicants (Bishop, Barron, and Hollenbeck 1983).

Employers make their hiring decisions with little relevant information about the applicant's ability to do the job. Research shows that employers rely heavily on their subjective assessments of an applicant's performance in the job interview and less on more valid predictors of on-the-job performance, such as aptitude tests and high school performance infor-

mation. Also, many firms do not check references before making a job offer. Even though previous employers can provide information on an applicant's job performance, productivity, and attendance, more than one-third of the firms in the employer study never checked the employer references of the persons they last hired. An even larger proportion of firms made no attempt to contact a potential employee's teachers (Bishop, Barron, and Hollenbeck 1983).

The ineffectiveness of current hiring practices is evidenced by the fact that more than half of all newly hired workers leave the firms that hire them before the year end—a signal that at least one party to the agreement regrets the original hiring decision. While an employee who quits or is fired from a job *sometimes* loses (for example, time, money, or esteem), the employer *always* loses. Selection, hiring, and training costs over the first 3 months of employment total about 1.5 months of output by a tenured employee. For each employee who leaves, these costs have to be incurred again when a replacement is found. Costs related to a loss of worker productivity are also high. Supervisors, when questioned about the productivity of workers who have left their firms, reported that (1) people who quit were 10-20% less productive than the worker who stayed and (2) people who got fired were 30% less productive than workers who stayed (Bishop 1982).

The implications of these facts make it imperative that employers find ways to improve their selection processes. The following recommendations, which are based on the results of a 4-year multidisciplinary research program on education and employment conducted by the

National Center for Research in Vocational Education, address five basic selection techniques: (1) recruitment channels, (2) the inter-

view, (3) aptitude tests, (4) high school performance information, and (5) references

Recommendation 1

Use Recruitment Channels That Are Appropriate to Your Firm and to Current Labor Market Conditions

Employers seldom use all the recruitment channels available to them. Many rely solely on personal referrals and never use other channels at all (Granovetter 1974). The extent and intensity of an employer's recruitment efforts depends on a variety of factors, such as size of firm, number of applications on file, amount of training required on the job, hiring and firing regulations, numbers of openings in the firm, type of open positions (part-time or full-time), and the amount the firm is willing to invest in the employee search. A study of employee recruitment and selection strategies revealed the percentage of employees hired through various recruitment channels (see table 1).

While each firm's labor market situation is unique, there are some common guidelines for using recruitment channels.

Use Channels Most Likely to Yield Productive Workers

To learn if some channels produce more productive workers than other channels, a comparison was made among individuals who entered the same type of job at the same firm but who were recruited from different sources (Bishop 1984). The results of the comparison show clear differences in worker wages and initial productivity according to seven major referral sources.

Other Employers. Employer referrals took 13 percent less time to train than walk-ins, were 8 percent more productive in the 3rd through 12th weeks, and were paid 7 percent more at the time of the interview.

Unions. Union referrals received significantly higher wage rates (56 percent for the starting wage), were reported to be 50 percent more productive in the first two weeks, and took

31 percent less time to train than people recruited through friends and relatives of current employees.

Friends or relatives of owner or current employees. These hires were 4 percent more productive in the first 3 months than walk-ins, but they did not receive higher wages.

Public agencies. Workers referred by public agencies such as state employment services, welfare agencies, or the Urban League did not work out as well as the employees recruited through friends and relatives of current employees. They were 12 percent less productive, both initially and about a year after being hired. Consequently, they had a 33 percent rather than a 7 percent probability of being dismissed and their average tenure was 32 percent shorter.

Newspaper ads. Compared to employees recruited through friends and relatives, those recruited through ads were 9 percent less productive both initially and at the latest date for which information was available. About 20 percent had to be dismissed and their tenure was 24 percent shorter.

Schools. School-referred employees were 20 percent less productive in the first 2 weeks but very quickly became just as productive as those recruited through friends and relatives. The turnover and training requirements for these employees were also similar to those of people recruited through informal channels.

Private employment agencies. One of the most interesting findings was about private employment agency referrals. Such firms generally charge a substantial fee, so it was expected that their referrals would be better in some way: be more productive, require less training, have longer tenure, or receive lower

TABLE 1

USE OF VARIOUS RECRUITMENT CHANNELS

Channel	Percent of Workers Hired
Other employers	6
Unions	1
Friends of current employees	31
Relatives or owner or current employees	10
Public agencies	3
Newspaper ads	12
Schools	4
Private employment agencies	3
Apply directly	25

SOURCE: Bishop, Barron, and Hollenbeck 1983.

wages. These expectations were contradicted. Compared to workers recruited through friends and relatives of current employees, agency

referrals were less productive in the first 3 months, required more training, and were more likely to quit.

Use Recruitment Channels That Are Most Likely to Yield Workers That Are Profitable to Employ

Competition forces a firm to make a job offer to an applicant that is at least equal in compensation to the offers that applicant can obtain from other firms. Therefore, if a worker has characteristics that predict higher productivity to many firms, that worker may not be as profitable to a single firm as the worker whose characteristics that predict productivity are known only to that firm. Thus, a worker recruited through friends and relatives of a current employee, through another employer, or through school personnel offers a firm the advantage of being able to learn information about the person that probably is not available to other employers the person contacts. Such information allows the informed employer to make a more refined

choice among applicants but does not necessitate that the firm offer a higher wage (Bishop 1984).

Information on the profitability (the differences between productivity net of training costs and the wage) of new hires, both initially and after a year at the firm, was obtained by comparing individuals entering the same job at the same firm who were recruited from different sources. The results of this study revealed the profitability of workers hired through various recruitment sources *as compared to workers referred informally through friends, relatives, and other employers* (see table 2).

TABLE 2
COMPARATIVE PROFITABILITY OF WORKERS

Recruitment Source	Profit Margin	Turnover	Hiring Costs
Unions	67% lower	higher	higher
Public agencies	14% lower	higher	higher
Private employment agencies	32% lower	higher	higher
Newspaper ads	10% lower	higher	higher

Overall it is clear that recruitment source has large implications for the initial profitability of a new hire and that informal channels gener-

ally result in more profitable hires than formal channels (Bishop 1985).

Recommendation 2

Improve Your Interviewing Techniques

The interview continues to be the process employers rely upon most to make their employee selections, even though research suggests that it is a costly inefficient, and frequently invalid process for predicting job performance. Good performance in the interview usually indicates the applicant is poised, has good communication skills, and can act in a pleasant and agreeable manner. However, good performance on the job may depend upon having good eye-hand coordination—something not tested in the interview (Bishop 1985).

The typical interview relies heavily on the interpersonal dynamics between interviewer and applicant resulting from the interactions of their personalities. To be a truly effective predictor of on-the-job performance, the interview must be structured to reveal the relevant, job-related characteristics of the applicant and to allow for an objective appraisal of the applicant's suitability for the job.

Make the Interview Relevant to the Job

The selection interview should be focused on applicant characteristics that are relevant to job performance and that cannot be measured by more reliable means. Emphasis on subjective, personal factors such as dress, grooming, and personality should be avoided unless these factors are key to the job description.

Plan and Use a Format for Your Interviews

Specific information desired from the applicant should be identified before the interview. During the interview, employers should concentrate on collecting and recording this information. Planning and sticking to a set format for the interviews will help focus attention on job-relevant information rather than on outward appearances.

Use the Interview as One Step in the Selection Process

Treating the interview as only one step in the overall hiring process will keep it in proper perspective: it is just one more chance to ask the questions and get the information needed to make a good match between an applicant and a job.

Consider Having Another Person Take Part in the Interview and Make the Final Decision

Using this approach requires coordination. The person or persons conducting the inter-

views need to use a standard format, so that the information gathered is comparable. However, all interviewers could easily plan a common format that each would use. Likewise, all interviews must be clearly focused on gathering relevant information about applicants' qualifications for the specific requirements of the job. This again would be a simple matter of jointly determining what information is relevant and then developing a format to gather it. Finally, the decision maker would need to receive notes on interviewees from each interviewer.

Recommendation 3

Use Aptitude Tests to Predict On-the-Job Performance

Although controversial in recent years, professional and legal opinions are changing about the use of aptitude tests in assessing job applicants. A growing body of research points to these tests as valid predictors of on-the-job performance. The type of aptitude tests that best predicts job performance varies depending on the job and required job skills, as described below (Hunter and Hunter 1984).

Test for General Mental Ability

Roughly similar to an IQ test or to college entrance examinations such as the Scholastic Achievement Test (SAT), general mental ability tests focus on verbal, quantitative, spatial, and reasoning abilities. In short, they test the skills that most people equate with "intelligence." Tests of this type are the best predictors of job performance in jobs that have a high level of complexity and emphasize mental rather than physical work. Working in these levels of jobs are managers, higher level sales persons, computer programmers, and skilled craftspersons.

Test for General Perceptual Ability

General perceptual tests evaluate the ability to perceive detail quickly, to identify patterns, to

visualize objects, and to perform other tasks that rely on speed or accuracy in picking out an individual element from a mass of apparently undifferentiated elements. These types of tests are good predictors of job performance of line supervisors, clerical workers, semiskilled blue collar workers, and law enforcement officers. Typically, these jobs of medium complexity involve a combination of mental and physical work, although many semiskilled trades emphasize physical work.

Test for Psychomotor Ability

Psychomotor tests are used to determine the ability to manipulate objects physically. An example is a dotting test, which requires the test taker to place a single dot within each of a series of very small circles. Psychomotor tests are often the best predictors of performance in jobs that tend to involve simple, repetitive tasks such as operating a vehicle, feeding a machine, laying sod, and other general laborer positions.

The validity of alternative predictors of on-the-job performance by cognitive complexity of the job are shown in Figure 1.

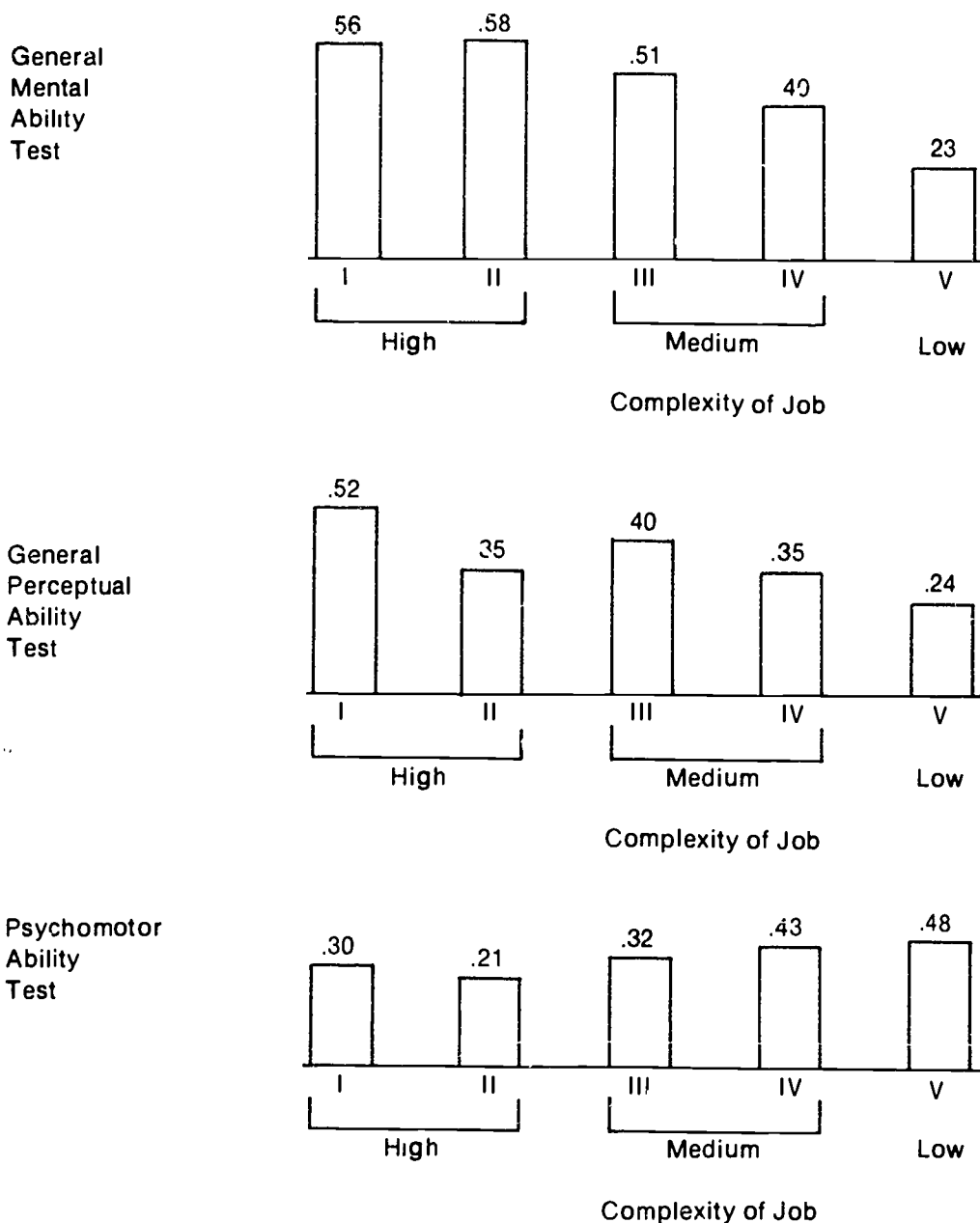


Figure 1. Validity of alternative predictors of on-the-job performance by cognitive complexity of the job.

SOURCE: Hunter and Hunter (1984)

NOTE: The scale is the correlation between supervisor rating and the tests. A test that always matched the supervisor rating would get a score of 1.00 on this graph. A test that bore no relationship to supervisor ratings would get a score of zero.

Recommendation 4

Use High School Performance Information in Assessing Job Potential

Information about an applicant's performance in high school can also provide a solid basis for the hiring decision. Grade point averages, courses taken, vocational training received, attendance records, achievement awards, and participation in part-time employment and student vocational organizations all give objective information about applicants. Furthermore, a long-term benefit of using such information is that students will come to know that quality performance in high school will make it more likely for them to be hired. Once students can see the direct connection between school performance and employment they will have greater motivation to work hard and perform well in high school.

Require Transcripts from Applicants

Employers should request that applicants who are recent high school leavers bring a copy of their transcripts to their interviews. Or, an optional consent form should be included on the application that the job applicant can sign

permitting employers to obtain such information from the high school.

Obtain from the High School Other Information about the Applicant, such as Deportment, Effort, and Attendance, as well as Honors and School Activities

Some employers view effort and work habits as more important indicators of job success than knowledge of math or history (Miguel and Foulk 1984; Wilms 1983).

Establish with Schools a More Complete Standardized Framework for Documenting Students' Accomplishments Achievements, Deportment, and so Forth

For example, initiate use of an employment credentials document or career portfolio.

Recommendation 5

Check References

Whether the reference check is with a former employer or a teacher, the cost of such a check is low—less than 20 minutes of the employer's time. If a worker quits or is fired after 3 months, the loss is equivalent to between 1 and 2 months of output from an experienced worker. For a job where the total compensation of experienced workers is \$20,000 per year, the mistake will cost more than \$1,000. If reference checks were to reduce the separation rate by even 5 percentage points, the firm could expect to save about \$60 every time it made a reference check on its most highly ranked job candidate.

Contact Former Employers or a Previous Supervisor to Learn about an Applicant's On-the-Job Performance

While many firms will not formally reveal information about a past employee, many will respond to questions presented in a telephone interview.

Talk with Teachers to Learn Their Assessments of an Applicant

When the exchange is an informal part of a relationship of trust between teacher or principal

pal and employer, the process works best. However, various federal and state laws have made it illegal for school staff to share certain information without the student's written permission.

One way to get permission is to include a "teacher" category under references on the application form.

Recommendation 6

Offer Incentives to Attract Dedicated and Qualified Workers

If young people are to spend time, effort, and sometimes money to acquire the skills and competencies desired by employers, they need to know they will realize rewards for their efforts.

Develop a Pay Structure that Reflects Academic Performance and Job Competencies Acquired through Training

One of the reasons high school students are not motivated to apply themselves to their studies is that they see few immediate rewards for their efforts. For those who do not go to college, high school grades and test scores have—

- no effect on the *wage rate* of the jobs obtained immediately after high school,
- a small effect on *employment* and *earnings* immediately after high school, and
- a moderate effect on *wage rates* and *earnings* after 4 or 5 years.

The long delay before labor market rewards are received is important because most young people consider benefits promised 20 years in the future to have little influence on their decisions today. Studies of the percentage increase in wage rates earned for a 110 point increase in SAT scores (or equivalent in grade-point average or another test) over the first 5 years after high school graduation revealed that such achievement lowers wages for at least the first 2 years of employment but raises wages after 4 or 5 years (Kang 1984; Kang and Bishop 1984). (See figure 2.)

Research also shows that employers offer little reward to applicants who have received job relevant training from prior employers. For the most part, this is because employers have no way of determining the quality or extent of the previously received training. In almost all entry-level jobs, wage rates reflect the level of the job, not the worker's productivity. Cognitive abilities and productivity make promotions more likely, but it takes time for the imperfect sorting process to assign a particularly able worker a job that fully uses that greater ability—and that pays accordingly.

This reward structure contributes to high job turnover and ultimately costs the company money—money it could save by finding ways to test and evaluate the competencies of qualified workers so it could offer greater wage incentives to those who meet the company standards.

Increase Investments in Training

A study of employer training of newly hired youth revealed that 90 percent of training is informal and is provided by a coworker or an immediate supervisor on a sporadic or as needed basis (Borman 1984). The narrowness and minimal amount of training offered by employers can be attributed to employers' reluctance to invest money in training young applicants who may leave the firm within the year. In fact, employers may be incurring more expense by failing to train newly hired youth since such training would ultimately improve these employees' skills and thereby increase their confidence, job satisfaction, and willingness to remain with the employer.

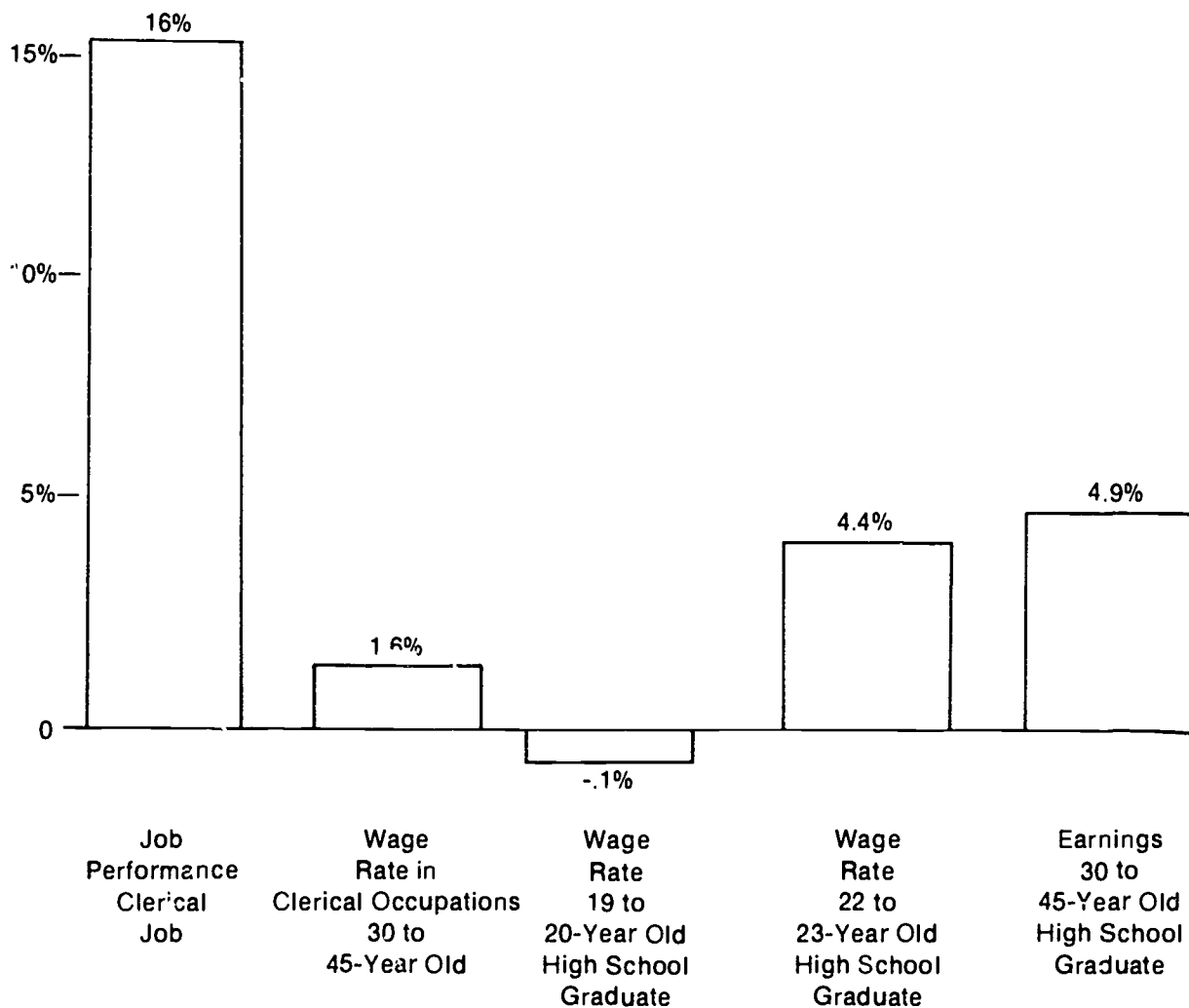


Figure . Impact of 110 point improvement on both math and verbal SAT

Helping Students Get Jobs: Recommendations for Teachers and Guidance Counselors

High school leavers—dropouts as well as recent graduates—are finding it difficult to obtain jobs. When these youth do find employment, it is typically in jobs that pay only the minimum wage, offer little or no on-the-job training, and present no opportunity for advancement. These factors, as well as an inability to adequately assess job offers, result in high job turnover and further periods of unemployment for youth (Bishop 1985).

Through a research project conducted at the National Center for Research in Vocational Education, three causes of these problems have been identified.

Young people do not know how to market themselves. They use only the most obvious and often the most ineffective job search methods, know little about the employers' hiring standards, lack confidence in their skills and abilities, and have little or no experience in using job application and interviewing techniques. When the young people do receive job offers, they often don't know how to evaluate the desirability of a job and its appropriateness to their skills, needs, and lifestyles. Job applicants seldom reject a job offer even though employers reject job applicants 8 times more often than they make offers (Bishop 1985).

Employers often lack information that would lead them to hire an applicant. High school transcripts and other information on school performance are difficult for employers to obtain, even though such information can be good pre-

dictors of a young person's on-the-job performance (Hollenbeck 1984). Few students know that it is important for them to provide this and other pertinent information to employers.

Some young people do not have the competencies employers want. Employers are looking for workers who have mastered the basic skills of reading, writing, oral communication, computation, and deductive reasoning (Hollenbeck 1984; Bishop 1985). They also want the people they hire to have employability skills—e.g., good attitudes, a willingness to work and cooperate with others, and good work habits, such as promptness and dependability (Hollenbeck 1984). Unfortunately, many employers feel that today's youth lack these skills upon leaving high school. Employers therefore prefer to hire people who have work experience and records of proven job performance.

As teachers and guidance counselors, you can help students in their transitions from school to work by showing them the connection between hard work in school and success in the labor market and by providing them with instruction, information, and experiences that will prepare them for future work.

The recommendations that follow detail steps you can take to ensure that your high school leavers will be able to find jobs that are right for them, either immediately after leaving high school or after further education and training.

Recommendation 1

Motivate Students to Apply Themselves to Their Studies

In 1979, 21 percent of high school seniors were absent from school for some reason other than illness at least 5 times between the beginning of school and Christmas. Nearly 70 percent reported that poor study habits interfered with their education. When absences, inattention, and time spent on extracurricular or nonacademic activities are combined, more than half of the weekday of the average high school senior is not used for learning (Bishop 1985). Even more important than the time engaged in learning is the intensity of the student's involvement in the process. The results of a 2-year study of American high schools suggest that as students, American high school youth are all too often docile, compliant, and without initiative (Sizer 1984). One probable reason for this behavior is that high school students, particularly those not planning to attend college, lack motivation. They see no immediate gratification to justify increasing their scholastic efforts and they see little opportunity for delayed gratification, recognizing little connection between performance in high school and future success in the labor market. Motivating students is a very real challenge for today's teachers and counselors.

Stress the Importance That High School Performance Has in Employers' Hiring Decisions

Research on employer practices reveals that among the educational characteristics a youth may possess, high school grade point average has the strongest influence on employability ratings (Hollenbeck 1984; Hollenbeck and Smith 1984).

Increase Recognition for Student Academic Accomplishments

A number of cities have started awarding school letters for academic achievement. Another form of recognition is to have an evening assembly to which parents are invited and during which students would be awarded

a certificate or plaque recognizing their accomplishments

Offer In-School Rewards for Good Performance

Outstanding academic performance should not be the only way of defining excellence. Awards should be given for leadership, participation in extracurricular activities, participation in student government, public service, perfect attendance, and so on. Awards and honors systems should be designed so that almost every student can receive at least one award or honor before graduation if he or she makes the effort. Many employers are likely to be more interested in the grades for effort and deportment than for knowledge. One employer, for instance, told interviewers: "We look for enthusiasm and desire to work. Today a young person can be outstanding by just *wanting* to work" (Hollenbeck and Smith 1984).

Show a Personal Interest in Each Student

Be aware of the factors that affect the student's ability to apply himself or herself to school tasks. Dr. Amitai Etzioni, professor of sociology at George Washington University, spoke about the difficulty of establishing closer student-teacher relationships:

Our schools, especially our high schools, have been reorganized after Sputnik to allow for what is called a quick shuffle. As you know, in many schools the teacher stays put and every 45 minutes or so the kids get shuffled to a different classroom, to a different specialty. That prevents, as if designed by some mad sociologist, any deep relationship from developing between the teacher and the student. And I asked a teacher once, if a child has a divorce or death in the family and the child is falling behind on all work, is the teacher going to do anything about it? The teacher said, "I

wouldn't even know about it." (Miguel 1985)

Use Cooperative Learning Strategies in the Classroom, in Which One Student Teaches Another or in Which Two Students Work Together to Accomplish a Task

The goal of this type of effort is to capture the same kind of motivational dynamics present in team sports. Barbara Dandridge, assistant principal at Mt. Hebron High School in Ellicott City, Maryland presented this rationale:

In the traditional setting, students are taught in a way—geared in a way—to be selfish about their knowledge. They say, "I can make an A. I'll outshine everybody

else." In this setting (students teaching each other for part of the day), they really share their knowledge—it's spread around a little bit and the unselfishness is a plus. (Miguel 1985)

Provide Information and Instruction about Employer Priorities and Practices

The Employer's Choice: Priorities That Count (Lankard and Miguel 1987), a student guide based on the results of an employer survey, details the degree to which given skills, abilities, attitudes, and behaviors affect employability. It presents facts about what employers are actually doing, not ideas about what they should be doing. Students need such information to develop a realistic view of their potential in the job market.

Recommendation 2

Provide Students with Opportunities for Vocational Training and Relevant Work Experience

Preparing students for work requires attention to a variety of skills—basic skills, vocational skills, and employability skills. These are the skills employers want. David F. Holscott, National Screw Machine Products Association, said

in the interview, we look at cognitive or mental characteristics: the ability to read blueprints, calculate math; the ability to use machines and tools to make parts. Second, we look at personality traits. "Will this person fit into my operation?" (Miguel 1985)

Since the costs of hiring and training employees are great, employers (particularly those in high-skilled occupations) seek out applicants who already have the required skills and the capacity to learn things quickly. Said David Holscott,

job skills are the name of the game. They are the reason why an employer hires an employee. Most employers train, but the worker has to have a certain skill level so

that the employer can move him or her from that skill level to a precision skill level. And the employer has to do it quickly because he or she has to get the worker productive to pay for his or her salary. (Miguel 1985)

Students need opportunities to develop these skills before they seek employment.

Encourage Students to Consider Job-Related Curriculum Options That Build on the Basic Skill Courses They Are Taking

Efforts should be made to bridge the gap between academic and vocational education and present each aspect of education as important to the other. In helping students with their curriculum options, you might suggest a journalism course to a student who does well in English composition or a woodworking class to a student who likes to work with his or her hands and who responds with interest to math problems regarding measurement. All employers

tend to give preference to applicants who have participated in job-relevant cooperative or experiential educational programs (Kang and Bishop 1984).

Research suggests that students who are not planning to go to college full time should take a concentration of 3-5 full-year courses in some field of vocational education. The earnings of 1980 high school graduates who had taken such a concentration were 12-16 percent greater than the earnings of those who had taken no vocational education (Kang and Bishop 1984).

Encourage Students to Combine Basic Skills with Vocational Skills Development

The research showed that communication skills and reasoning abilities had major effects on the probability of finding employment, productivity on the job, and the chances for promotion. Therefore, it is important for high school students to select courses that will develop these skills and abilities. The research also found that taking additional non-college-preparatory academic courses did not have positive effects on academic achievement. Apparently what counts is not the time spent on academic classes but the rigor, challenge, and relevance of what is covered in those classes. The following ratio of academic to vocational course work during the final 3 years of high school maximized earnings in the year after graduation: 2 to 1 for males and 5 to 4 for females (Kang and Bishop 1984).

Establish Referral and Support Relationships with Local Employers

Invite employers to visit the classrooms and participate in classroom instruction. Employers benefit from this arrangement by being able to discover information about the students soon to graduate and make assessments about those they might wish to hire. The students benefit by having a direct link to local employers, thus facilitating their job searches. Retired employers are excellent advisors too, especially since they have more time to devote to such a commitment.

Serve as an Informational Contact with Employers for Students Who Seek Part-Time, Summer, or Post-High-School Full-Time Employment

Whenever possible, there should be a one-on-one relationship between a specific teacher or administrator and an employer. Informational relationships of this kind are more effective in securing placements for students. When schools formalized this relationship by creating a placement office, job placements tended to decrease (McKinney et al. 1982).

The best example of an informal contact system is the one that exists for many vocational students. Vocational teachers often know local employers in related fields; they also know their students well enough to honestly recommend them. This kind of informal system could be extended to include all students who are not planning to attend college.

Develop Ways for Students to Get Work Experience

The experience of work during high school contributes to the development of a realistic view of the world of work. An analysis of the effects of working during high school on labor market success after graduation revealed that working while in high school increases later labor market success for non-college-bound youth. Youth who worked while in high school are unemployed less and work more weeks per year than those students who did not work in high school (Lewis, Gardner, and Seitz 1982; Ellwood 1981; Stephenson 1981). Several studies have also found that this group's wages tend to be higher and that these effects hold true for whites and blacks, females and males. In another survey, clerical, retail, and machine trades employers were asked how they would rate the employability of high school graduates with work experience. The table 3 shows the point advantage these employers gave applicants with these characteristics.

In studying the effects of working during high school on academic achievement, D'Amico and Baker (in press) found no important effects of working on academic performance or

TABLE 3
EMPLOYERS' RATINGS

Characteristic	Point Advantage		
	Clerical	Retail	Machine Trades
Is a high school graduate who has some work experience <i>but none relevant to the job</i> instead of a high school graduate who has no work experience	12	19	3
Is a high school graduate who has some work experience <i>that is relevant to the job</i> instead of a high school graduate who has no work experience	19	25	18

on educational progress in high school. In fact, they conclude that working increases the student's chances of completing high school, although it seems to reduce the likelihood of attending college. Another study (Hotchkiss 1982) found that working during high school had no effects on grades, participation in extra-curricular activities, days absent from school, days tardy, educational expectation, or occupational expectations.

Incorporate Employability Development Concepts in All Curriculum Instruction

A study of employer hiring decisions revealed that behavior factors greatly influenced

employers hiring decisions (Hollenbeck 1984). In the study, employers watched a videotape showing 35 staged interviews for clerical, retail, and machine trades jobs. The employers then indicated their ratings of applicants based on each applicant's interview behavior—namely, attitude, language, appearance, mannerisms, and explanation of employment gaps. The training, education, and work experience of the applicants for each type of job remained constant across the interviews. Table 4 shows how interview behaviors affected the employers' assessments of an applicant's job readiness. Note that negative behaviors lowered the employers' assessments of other factors such as education and training.

Recommendation 3 **Teach Employability Skills**

In a study to learn what characteristics are important to employers when selecting new workers, the following characteristics emerged: (1) attitude and appearance, (2) job search skills, (3) basic academic skills, (4) education, (5) vocational skills and training, and (6) work experience. Of these, factors associated with

attitude and appearance led the list. Positive attitude, general appearance, and motivation to work were most important in the employers' view and were followed closely by skill in completing the job application, communication skills, and language literacy. Attitude and appearance continue to be important factors in

TABLE 4
INTERVIEWER RATINGS OF JOB READINESS

Applicant Characteristics	No Negative Behavior	Inappropriate Dress	Inappropriate Language	Bad Attitude	Poor Nonverbal Behavior
Education/training	3.61	3.25	3.20	2.91	3.19
Work experience	3.71	3.51	3.20	2.78	3.35
Appearance	4.04	3.43	4.02	3.84	3.33
Grammar	4.11	3.93	1.89	1.69	3.27
Attitude	4.13	3.78	2.33	1.46	3.11
Personality	4.09	3.87	2.76	1.96	2.39
Percentage that would hire	93%	87%	19%	2%	39%

job retention. Table 5 shows employer ratings of factors based on severity of problems in the first month of employment while in high school, using a scale of 0-100 (Miguel and Foulk 1984).

Evidence of the importance of employability skills testifies to the need to teach and reinforce learning of such skills. There are several strategies for doing this.

Demand Good Deportment in the Classroom

Initiate strict guidelines for tardiness, class cutting, and discipline. A study of employer hiring standards (Miguel and Foulk 1984) revealed that 41 percent of employers were "somewhat negatively" affected by an applicant who had been absent 12 different times during the school year. Twenty-eight percent were "negatively" affected and 8 percent were "very negatively" affected.

Express Work Values through Classroom Instruction

Promote and require timeliness, effort, responsibility, and the like. Of the employers interviewed about job performance standards in

the study (Miguel and Foulk 1984), 45 percent said they would "warn the worker" who didn't try and was 15 percent less productive than other workers who had the same training; 12 percent said they would "suspend the worker"; and 10 percent said they would "fire the worker immediately."

Encourage Self-Esteem in Students, Expecting the Best from Them

Self-esteem has much to do with the way a person presents himself or herself. This attitude about self is frequently reflected in an applicant's nonverbal behavior—a factor that affects employers' decisions to hire. Table 6 shows the percentage of each type of employer who would hire applicants with poor nonverbal behavior.

Promote and Display a Positive Attitude in the Classroom

Attitude is such an important part of a person's employability rating that it is imperative that teachers, counselors, and other school staff constantly reinforce the importance of maintaining a positive attitude through example as well as through instruction. In the survey of employer hiring decisions, only 11.1 percent of

TABLE 5
FACTORS IN JOB RETENTION

Factor	Employer Ratings on a Scale of 0-100
Attitudes and Appearance	
No effort—85% productivity	66
No effort—100% productivity	45
Reports to work drunk or stoned	85
Records more hours than worked	76
Refuses undesirable tasks	71
Doesn't call in when sick	71
20 minutes late—no excuse	60
Caused \$100 damage to equipment	60
Spends 15 minutes/day personal calls	56
Needs twice as much supervision	54
Finishes work; doesn't ask for more	55
Angry and sulks when criticized	53
Comes to work dirty or sloppy	51
Argues with co-workers	54
Grips about working conditions	49
Wears flashy or sexy clothes	45

TABLE 6
MEAN EMPLOYABILITY HIRING PERCENTAGES BASED ON BEHAVIOR

Interview	Percentage of Employers Who Would Hire		
	Clerical	Retail	Machine Trades
Poor nonverbal behavior	40.6	15.4	75.0

the machine trades employers would hire a person with a bad attitude. However, *none* of the clerical and retail employers would hire an applicant with this characteristic.

Use Instructional Materials That Illustrate the Importance of Employability Skill Development

The CONNECTIONS: SCHOOL AND WORK TRANSITIONS package offers several options

of curriculum on employability. The case studies in *The Employer's Choice: On The Job* (Izzo and Lankard 1986) provide examples of how having (or lacking) employability skills affects a person's ability to find, get, and keep a job. *Work Maturity Skills* (Lankard 1987), a set of competency-based instructional materials written at the 4th grade reading level, detail procedures for acquiring specific employability skills.

Recommendation 4

Teach Job Search Skills

Research has shown that most job seekers do not search for a job in the most effective way possible. Table 7 compares the percentage of job seekers who use particular methods of job search with the proportion of jobs found by each method. The two columns on the left report the percentages of jobs *found* by each method. The third column reports the percentage of successful job finders who *used each method at some time during* their job searches. The job search methods being *used by people currently seeking jobs* are given in columns four and five—column four is for employed and column five is for unemployed job seekers. We can draw several conclusions from table 7:

- A large percentage of all jobs are found through informal sources (over 60%), yet job seekers do not seem to rely on this method.
- Job seekers seem to like to contact employment services; 25 percent of unemployed job seekers have recently contacted an employment service. However, very few jobs are found this way—less than 6 percent.
- Contacting firms directly, either by walking in or calling, finds a lot of people their jobs.

The overall conclusion to be drawn from these points is that most people do not search for a job efficiently. You can provide your stu-

dents a great service by helping them in this regard.

Teach Informal Job Search Methods

Employers seem to prefer recruitment through informal sources such as friends and relatives or walk-ins over recruitment through more formal sources like employment agencies. As analyzed by Bishop, Barron, and Hollenbeck (1983), this preference is quite rational from the employer's point of view for several reasons. First, selecting an employee from walk-ins or informal referrals is cheaper for employers than relying on lengthier, more cumbersome, formal sources. Second, new workers recruited through informal sources seem to be more productive than new workers hired through other sources. Finally, employees who are recruited through contacts tend to stay at the firm longer.

Seeking a job through a friend or acquaintance contact is also quite rational from the job seeker's point of view. The contact can talk directly to the employer, mention the job seeker's name, and act as a reference for him or her. Trusted references are very important to employers and can give support to the job seeker's credibility.

Seeking a job through contacts can also help the applicant arrive at a firm at the right time. If the contact is also an employee, he or she is likely to know when the employer will be

hiring. Arriving at the beginning of the selection process gives an applicant an advantage. An additional advantage of seeking jobs through personal contacts who work at the firm or know the employer is that the job seeker can learn about the job's requirements and the climate at the firm; thus, the applicant can be more knowledgeable in the interview and avoid applying for jobs that do not match his or her interests or abilities.

Teachers and counselors can make use of these findings to help their students in several ways. One is to teach students the benefits of informal job search methods. Informal job search contacts include acquaintances—indeed, some evidence suggests that acquaintances are a better resource than relatives or friends

(Granovetter 1974). Students can be encouraged to develop contact with ministers, community organization workers, community politicians, and so forth. Students can also be taught to contact firms directly. Although this means contacting some firms that are not hiring, the high percentage of jobs found by this method makes it worthwhile.

Help Students Provide Information to Employers

Most high school leavers are looking for their first full-time positions. Many of them have never worked, not even in part-time or temporary jobs, and therefore have no prior work

TABLE 7
JOB SEARCHING METHODS COMPARED

Job Search Methods	Percentage of Jobs Found by This Method		Percentage of Job Seekers Using This Method		
	1981 Employer Survey ^a	1973 Worker Survey ^b	Job Finders ^b	Employed Job Seekers ^c	Unemployed Job Seekers ^d
Informal	66.3	61.1			
Friend	31.4	17.9	92.6		
Relative	10.4	8.3	55.7	17.9	15.5
Apply Directly	24.8	34.9	66.0	69.9	75.1
Formal	33.7	38.9			
Newspaper Ad	11.8	11.8	50.0	25.3	30.7
Employment Service	3.6	5.1	33.5	10.4	25.2
Private Emp. Service	2.7	5.6	21.0	5.5	7.2
School	3.7	3.5	12.5		
Union	.7	1.5	6.0	6.9	6.6
Employer	5.6	N/A	N/A		
Other	5.6	11.4	N/A		
Total	100	100			

SOURCE:

^aBishop (1982)

^bRosenfeld (1975)

^cRosenfeld (1977)

^dEmployment and Earning (February 1974)

experiences. Because information on an applicant's school performance is difficult and costly to obtain, employers rely on subjective factors like dress, interview performance, and physical appearance in assessing young applicants. Or else, they consider only older applicants who can document their credentials through prior work experiences. If young applicants cannot provide information about prior school performance to offset lack of work experience, they have almost no chance of being chosen from a field of applicants.

You can help students promote their accomplishments, skills, competencies, and other credentials for employment by teaching them ways to document this information. Three forms of documentation are the resume, the career passport, and the employment credentials document in CONNECTIONS: SCHOOL AND WORK TRANSITIONS.

Resumes. Students should prepare one-page resumes that summarize their career objectives, education and training experiences, work experiences, awards and recognitions, and professional and community related activities. The resume should include as much detail about the student's accomplishments as is possible. It should also be well written and well prepared for printing—accurately typed, attractively arranged on page, and so forth.

Once students have prepared their resumes, direct them to carry copies with them to attach to each job application they complete. Doing this will have a positive influence on employers, enabling them to make hiring decisions based on facts rather than on subjective impressions.

When employers in a survey (Miguel and Foulk 1984) were asked how they would be influenced to hire a person who attached a completed resume to the job application, they responded as shown in table 8.

Curriculum materials that contain information and instructions on preparing resumes are included in Connections: School and Work Transitions. These materials are *The Employer's Choice: The Job Search* (Lankard 1987), *The Employer's Choice: On the Job* (Izzo and Lankard 1987) and *Career Passports* (Charner and Bhaerman 1987).

Job search portfolios. Job search portfolios or passports should be used to document students' strengths, special skills, competencies, and academic achievements. They should include information like transcripts of grade point average and completed courses, attendance records, records of awards, SAT or ACT scores, and names of teachers or other school staff to be used as references. Students should carry their job search portfolios, passports, and/or credentials for employment with them when they apply and interview for jobs. Providing such detailed, comprehensive information to employers can give the applicant an advantage, for it enables the employer to make a hiring decision based on facts about the application rather than on subjective impressions.

Teach Students How to Complete an Application Form Correctly, Neatly, and Comprehensively

Data collected through surveys to determine employers' hiring and job performance

TABLE 8
INFLUENCE OF ATTACHING A COMPLETED RESUME TO APPLICATION

	Degree of Influence			
	Not at all	Somewhat Positively	Positively	Very Positively
Percent of employers who would hire	7%	24%	40%	29%

standards revealed that filling out the job application in a neat and correct manner had a positive effect on 99 percent of the employers in the survey (Miguel and Foulk 1984). The percentage of employers who responded in each category is detailed in table 9.

The Employer's Choice: The Job Search (Lankard 1987) provides research data on what employers look for in assessing a completed job application and gives guidelines and practice activities on how to complete an application correctly.

Provide Instruction and Practice on Proper Interview Techniques, Incorporating Role-Playing Activities as Part of the Instruction

The fact that employers rely heavily on the interview in making their final hiring decisions should lead you to give special attention to preparing students for this part of the job search. Information about how employers assess job applicants in the interview, a videotape of simulated interviews for students to watch and assess, and opportunities for practice interview sessions are included in *The Employer's Choice: The Job Search* (Lankard 1987).

Teach Students to Evaluate Job Offers

Another problem young people seem to have is their inability to assess a job offer before

accepting it. The evidence for this is high turnover—over half of newly hired workers leave their firms before a year is up and most of these separations are initiated by the worker. Turnovers are very costly for both employer and employee. One cost for the employee is that he or she must find another job. Having too many jobs on a resume, especially jobs from which an applicant was fired, is considered a disadvantage by prospective employers who assess an application. Assessing a job carefully before accepting it will reduce turnover.

When looking for a permanent job, the job seeker should take into account a variety of job dimensions. Training opportunities, promotion policies, job security, vacation policies, absence and tardiness policies, and maternity leave rules are a few of the ways an applicant can evaluate a company.

Taking a realistic look at the employer before accepting a position can result in greater job satisfaction and longer tenure. Even if this means being unemployed slightly longer while looking for the right job, it is still a better strategy than accepting the first position offered and then quitting immediately. Quitting a job soon after starting usually lowers one's chances of getting the next job. It signals to prospective employers that they cannot count on the youth to make a commitment to a job. Procedures for handling job offers are detailed in *Job Search Skills* (Lankard 1987).

TABLE 9
EFFECT OF NEAT, CORRECT APPLICATION

Question	Employer Ratings			
	Not at all	Somewhat Positively	Positively	Very Positively
How would you be influenced to hire someone who filled out a job application in a neat and correct manner?	1%	22%	48%	29%

Promoting Employability Development: Recommendations for School Administrators

Developing employable graduates cannot be separated from developing graduates who have academic knowledge, athletic ability, artistic talent, and the like. Employability is an important part of the whole educational process, and little progress toward addressing it can be made in the classroom without the

encouragement, support, and involvement of school administrators.

A list of recommendations for promoting and implementing employability development in your schools follows.

Recommendation 1

Convince School Staff That the School Has a Responsibility to Prepare Students for Employment, Not Just Help Them Meet the Requirements for Graduation

Over 20 percent of our nation's high school students drop out of school before they graduate. Of those who do graduate, about 30 percent make high school graduation the end of their formal education and the starting point for work. The nature of these young people who now make up our entry-level labor pool is described in the publication *Reconnecting Youth: The Next Stage of Reform*, a report from the Business Advisory Commission of the Education Commission of the States (1985). The report states:

The entry-level labor pool contains more and more of the kinds of teenagers employers have been able to overlook in the past: poorly motivated, lacking fundamental literacy skills, and unacquainted with the responsibilities and demands of the work world. These young people are at risk of never living up to their potential, never leading productive lives. (Education Commission of the States, p. 5.)

The report further suggests that should these young people fail to become productive workers and citizens, they will deepen their alienation from and increase their dependency upon society.

Schools, parents, and business and industry cannot afford to ignore these youth. As school administrator, you can initiate action to reduce the problems of underachieving, poorly motivated, and unemployable youth. Following are some suggestions of ways to begin:

- Involve staff in a discussion of employability development, making available national and local statistics addressing youth employment.
- Convene a group of local employers to discuss their employment concerns and needs with school staff.
- Convene a group of students who have graduated, dropped out, or still attend

school. Ask them to help identify ways the schools can better meet student needs.

- Convene a group of college students (some working part time and some not working while attending school) to identify

ways high schools can better prepare students to finance their education and to select the occupations they will prepare for in their college years.

Recommendation 2

Involve the Entire School Community in Establishing Goals and Strategies for Improving the School's Effectiveness in Furthering Employability Development

The question of how to make education and training more effective in preparing people for work was explored in a study by the National Commission on Secondary Vocational Education. One of the recommendations of the Commission noted in its publication, *The Unfinished Agenda* (National Commission on Secondary Vocational Education 1984), is that employers be involved in assessing, evaluating, and updating classroom curriculum and instruction to ensure that it is relevant to the job market. To get such employer input, some schools have made extensive use of advisory groups that include people from business and industry, giving them full partnership roles in defining elements of the school's curriculum. Another source of input is parents. Research shows that parents have a very strong influence on the career development of their children—much stronger than the youth's peers or the school personnel (Hotchkiss 1984). This finding suggests that the school should attempt to involve parents in the educational process too.

Strategies for obtaining advice and recommendations from all persons who have an interest in improving the school's effectiveness in

preparing youth for school and work transitions follow:

- Assemble all persons involved with the school—superintendent, school board members, teachers, parents, business representatives, community members, and students—to communicate the purpose for and direction of your efforts to develop student employability.
- Assemble improvement teams composed of individual groups who have joint, direct impact on and involvement with a given area, such as curriculum choice, classroom configuration, and articulation with employers. Have these teams examine and analyze the state of the art at your school and at other schools.
- Have improvement teams list goals and strategies that would contribute to enhancing employability development in your school and then have team representatives share and refine those goals and strategies in a group meeting.

Recommendation 3

Provide a Common Core Curriculum That Develops Basic Skills, Occupational Skills, and Positive Attitudes and Behaviors

Supporting this recommendation are the findings from a recent study conducted by the National Center for Research in Vocational Education on the effects of curriculum choices on the labor market success of high school graduates. The study revealed that for most students, an increase in the number of vocational courses and an equal decrease in academic courses increased earnings. However, the earnings benefit of such a substitution fell as the number of vocational courses increased and the number of academic courses declined (Kang and Bishop 1984). What this suggests is that academic and vocational courses have complementary effects on employability. The mix of courses that seems to maximize earnings in the calendar year after high school is as follows:

- For men, about 36 percent vocational/64 percent academic
- For women, about 48 percent vocational/52 percent academic

Another study (Hollenbeck 1984) examined the effects of applicants' interview behaviors on employers' hiring decisions. The results of this study revealed that of the five types of behaviors demonstrated in the interviews, bad attitude had the most negative effect on employers' decisions to hire. As shown in table 10, none of the clerical and retail employers and only 11.1 percent of the machine trades employers would hire an applicant who demonstrated a bad attitude.

The following strategies are presented as ways you might implement recommendation 3 in your schools:

- Make vocational education an integral part of the curriculum.
- Require that all vocational courses integrate relevant basic skills (e.g., mathematics, science, communication) instruction in the course curriculum
- Establish linkages with people and organizations in the community to provide opportunities for work experience through such activities as service learning projects, hospital volunteer work, and so forth.
- Provide access to work-study programs, cooperative education programs, internships, and the like at times and places that are attractive to students.
- Offer courses that lead students to examine their attitudes about factors affecting work choices, such as determinants of status, rewards of different form of working, the nature of the economy, and job opportunities in the changing market.
- Incorporate employability development into all classroom and extracurricular activities.

TABLE 10
EFFECT OF BAD ATTITUDE

Interview Characteristic	Percentage of Employers Who Would Hire		
	Clerical	Retail	Machine Trades
Bad attitude	0.0	0.0	11.1

Recommendation 4

Motivate Students to Learn

Research findings testify to the fact that many high school students are not motivated to learn. Data from the High School and Beyond Survey revealed that in 1979, 21 percent of high school seniors reported they were absent from school for some reason other than illness at least 5 times between the beginning of school and Christmas. Nearly 70 percent reported that poor study habits interfered with their education; 43 percent admitted they cut classes every once in a while; and 12.6 percent had been suspended or put on probation. In 1980, high school seniors spent an average of 3.5 hours per week on homework. When homework time was added to engaged time at school, the total time students devoted to study, instruction, and practice was only 18-22 hours per week. By way of comparison, the typical high school senior in a public high school spends 10 hours per week in a part-time job and 20 hours per week watching television. Thus, television occupies as much of a student's time as learning.

There are obviously no easy answers to the question of how to motivate students to learn.

However, following are listed some strategies that the research suggests:

- Establish a system of awards and school-wide recognition for academic and non-academic accomplishments similar to athletic achievement awards.
- Implement a grading system that recognizes effort and improvement as well as accumulated knowledge.
- Use cooperative learning strategies in classrooms where students teach and learn from each other.
- Encourage more one-on-one interaction between teacher and student.
- Design ways to show students a more direct correlation between what they do in school and what they will do in a job; for example, design competency profiles that detail specific skills a student has learned that can be applied on the job.

Recommendation 5

Establish School Policies That Encourage Employability Skill Development

According to the employers in a recent study (Miquel and Foulk 1984), attitudes and work habits are the most critical factors for keeping a job. Table 11 shows how employers responded to factors related to following orders and company rules.

To ensure that a young person's behavior on the job will meet employer standards, the same standards should be established and enforced in the classroom. Some strategies for doing this follow:

- Demand good school deportment by initiating strict guidelines for absenteeism,

tardiness, class cutting, and discipline problems.

- Develop with teachers a standard set of guidelines for classroom instruction that promote positive work habits. For example, require that all classroom assignments be completed on time or be subject to a standard penalty.
- Initiate cooperative arrangements with employers, inviting them to serve as mentors for small groups of students and to speak to the students about the competencies they seek in employees.

TABLE 11

EMPLOYER RATINGS OF NEGATIVE JOB PERFORMANCE

Item	Ignore It	Discuss It if it Continues	Discuss It Immediately	Warn the Worker	Suspend the Worker	Fire the Worker Immediately
1. Didn't call in when sick?	0%	2%	18%	49%	16%	15%
2. Refused to do a job because it was undesirable or demeaning?	0%	4%	32%	26%	13%	25%
7. Griped about working conditions such as short coffee breaks or having to work an unpopular shift?	5%	26%	50%	14%	2%	3%
14. Acted angry or sulked when criticized?	1%	23%	44%	27%	2%	3%
23. Put more hours on the time sheet than actually worked?	0%	2%	16%	34%	15%	33%

Recommendation 6

Establish a Counseling System for Job Placement as Well as for Collage Placement

Experience has shown that when teachers engage in placement, not only do they build contacts with local employers who hire young people, but they also become more knowledgeable about the current and anticipated needs of those employers. Thus, these teachers are in a position to offer a valuable service (1) to employers by serving as referral sources, providing pertinent information about an applicant's high school performance; and (2) to students by serving as sources of job market information and as informal contacts with employers.

Also, keeping teachers involved in placement would enable them to gain feedback about the success of their graduates, information they could use in revising and updating their programs.

Some suggestions to facilitate job placement efforts in your school follow:

- Establish school files that contain job market information and information on postsecondary education and training programs.
- Establish a policy whereby student transcripts and other detailed records of student accomplishments are submitted promptly to employers with student approval when requested.
- Develop certificates and diplomas that recognize competencies achieved rather than time served.
- Develop competency profiles students can use in seeking jobs or admittance to post-secondary schools.
- Initiate the use of student job search portfolios or passports. Such records should contain information about each student's various activities and accomplishments, with samples of work when appropriate (e.g., drawings or sketches of an art student).
- Offer incentives to teachers as reward for their efforts in job placement activities.

REFERENCES

- Bishop, John. "Productivity Growth and Turnover." In *Subsidizing On-the-Job Training: An Analysis of a National Survey of Employers*, edited by J. Bishop. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1982.
- . "Why Do Employers Prefer Informal Recruitment Mechanisms?" Chapter 2 in *Hiring and Training Workers*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1984.
- . *Preparing Youth for Employment*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1985.
- Bishop, John; Barron, John; and Hollenbeck, Kevin. "Employer's Choice of Recruitment and Selection Strategies: Empirical Evidence Concerning Last Person Hired." Chapter 3 in *Recruiting Workers*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1983.
- Borman, Kathryn, ed. *The Adolescent Worker*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1984.
- Charner, Ivan and Bhaerman, Robert. *Career Passports*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1987.
- D'Amico, Ronald, and Baker, Paula. "The Nature and Consequences of High School Employment." In *Pathways to the Future: Volume 4*. Columbus: Center for Human Resource Research, The Ohio State University, in press.
- Education Commission of the States. *Reconnecting Youth: The Next Stage of Reform*. Denver, CO: The Education Commission of the States, 1985.
- Ellwood, David T. "Teenage Unemployment: Permanent Scars or Temporary Blemishes?" *The Youth Labor Market Problem: Its Nature, Causes and Consequences*, edited by Richard B. Freeman and David A. Wise. Chicago: University of Chicago Press, 1981.
- Employment Opportunity Pilot Project Household Survey (provided courtesy of Mike Keeley, SRI International, 1982).
- Granovetter, Mark S. *Getting a Job*. Boston: Harvard University Press, 1974.
- Hollenbeck, Kevin. *Hiring Decisions. An Analysis of Columbus Employer Assessments of Youthful Job Applicants*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1984.

- Holienbeck, K., and Smith, B. *The Influence of Applicants' Education and Skills on Employability Assessments by Employers*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1984.
- Hotchkiss, Lawrence. *Effects of Work Time on School Activities and Career Expectations*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1982.
- Hotchkiss, Lawrence. "Supply and Demand Effects on Part-Time Work of High School Students." Chapter 2 in *High School Preparation for Employment*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1984.
- Hunter, J. E., and Hunter, R. F. "The Validity and Utility of Alternative Predictors of Job Performance." *Psychological Bulletin* 96, no. 1 (1983): 72-98.
- Izzo, Margaretha Vreeburg and Lankard, Bettina A. *The Employer's Choice: On the Job*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1987.
- Kang, Suk, and Bishop, John. "The Effects of Curriculum on the Non-College Bound Youths' Labor Market Outcomes." Chapter 3 in *High School Preparation for Employment*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1984.
- Lankard, Bettina A., and Miguel, Richard J. *The Employer's Choice: Priorities that Count*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1987.
- Lankard, Bettina A. *The Employer's Choice: The Job Search*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1987.
- . *Workskills: Job Search Skills*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1987.
- . *Workskills: Work Maturity Skills*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1987.
- Lewis, Morgan V.; Gardner, John A.; and Seitz, Patricia. *High School Work Experience and Its Effects*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1982.
- McKinney, Floyd, et al. *Factors Relating to the Job Placement of Former Secondary Vocational Educational Students*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1982.
- Miguel, Richard J., ed. *Education and Employment: Where We Are and Where We Ought to Go*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1985.
- Miguel, Richard and Foulk, Robert. *Youth's Perceptions of Employer Standards: Effects on Employment Outcomes*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1984.
- National Commission on Secondary Vocational Education. *The Unfinished Agenda: The Role of Vocational Education in the High School*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1984.

Rosenfeld, Carl. "The Extent of Job Search by Employed Workers." *Monthly Labor Review* 100 no. 3 (March 1977): 58-62.

———. "Job Seeking Methods Used by American Workers." *Monthly Labor Review* 98, no. 8 (1974): 39-42.

Sizer, Theodore. *Horace's Compromise: The Dilemma of the American High School*. Boston: Houghton Mifflin, 1984.

Stephenson, Stanley P. "In-School Labor Force Status and Post-High School Wage Rates of Young Men." *Applied Economics* 13, no. 3 (September 1981): 279-302.

Wilms, Wellford W. *Technology, Job Skills, and Education: A Reassessment of the Links*. Los Angeles: University of California, 1983.

ASSESSING AND PLANNING WITH STUDENTS

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Introduction

Assessing and Planning with Students is a planning resource designed primarily to assist teachers and counselors to further develop their current career assessment/planning efforts. It presents an overview of the topics and provides a number of suggestions for career assessment as well as for facilitating career planning using individualized career development plans, computerized career guidance systems, and community resources in career planning.

Although this document represents a synthesis of numerous publications on the topic, it focuses only on selected aspects of career assessment and planning. The intent is to provide a means by which users can further design assessment and planning programs that meet the school transition needs of their students.

Assessment is an ongoing process to obtain insight into the widest possible range of factors relating to the students' school and work transitions, namely, their attitudes, aptitudes, abilities, achievement, skills, values, self-concepts, and so forth. Effective assessment requires a great deal of interaction between teachers, counselors, students, and parents. It must involve informal as well as formal strategies. Knowledge of academic and career options will enable teachers and counselors to help students assess where they are, where they hope to go, and how they (and their parents) can plan for their school and work transitions.

In gathering information about a student, consider the following student needs:

- **Physical needs.** Has the student had a general physical exam? Does the student use laboratory or sharp equipment and

supplies safely? Has the physically disabled student been able to adapt to the handicap?

- **Social needs.** Does the student participate willingly in group activities? Does the student have friends? Does he or she participate in extra-curricular activities and/or in community activities? (Remember, however, each of us varies in the amount and kind of social contact we need. Since students may have contacts we are unaware of, be careful not to overgeneralize in this—or any—area.)
- **Emotional needs.** Does the student have a sense of humor? When someone disagrees with him or her, how does the student react?
- **Educational needs.** What does the student aspire to be? Does he or she enjoy school work? At what level does the student read?

Know students' interests, as well as their needs, to better assist them with transitions. Several categories of questions to ask in this regard are as follows:

- **Personal interests.** How does the student spend his or her free time after school or on weekends? Does the student share hobbies with others?
- **School interests.** What courses has the student taken? What is the student presently taking? What electives? In what clubs and sports events is the student involved?

- Extracurricular activities. In what music, drama, school newspaper, or other extracurricular activities has the student participated?
- Occupational interests. What occupational areas are most interesting to the student? What work experience has the student had?

A student self-appraisal often is an appropriate way to begin the assessment process. The sample format presented in exhibit 1 can be adapted for this purpose.

Career assessment is the beginning step. All students need to be involved in their own planning and decision making about careers and about how they will prepare for and enter into those careers, thereby making successful transitions from school to work. Involving students in this *planning* process early in their high school years enables them to employ and develop their career planning skills while under the tutelage of a teacher or counselor. Such planning will help students channel their academic and work efforts toward specific goals, a skill that will continue to be useful whenever life's transitions cause them to reevaluate their goals.

EXHIBIT 1
STUDENT SELF-APPRAISAL

Categories	Ratings			Comments
	High	Med.	Low	
• Physical				
—I am usually alert in class	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
—I am in good health	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
—I have good physical coordination	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
• Social				
—I participate in group activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
— prefer to work alone	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
• Emotional				
—I have a sense of humor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
—I allow others to express their opinions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
—I can take a joke	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
• Educational				
—I follow directions well	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
—I plan well and carry out my plans	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

SOURCE: Adapted from *Determine Needs and Interests of Students* (1977).

Suggestions for Career Assessment

Informal Assessment

Informal Observations

Learn about students by observing them in a variety of situations—classrooms, study halls, school social events. Students, particularly those with problems that could become serious handicaps to future schooling and/or work, often send clear messages about their disinterest, dissatisfaction, or feelings of inadequacy in their school situations. Some questions for which to seek answers through informal observations are: What is the student's attitude toward school, toward teachers, and toward peers? Does the student use his or her time effectively? What kind of an employee might this student make?

As always, here are some cautions:

- Be certain the student does not feel singled out or observed more frequently than any one else.
- Do not let personal biases affect your judgment
- Compare your observations with other information sources.

Attitude Assessments

Learning students' attitudes about themselves, their schooling, work, and their future requires more than observation. Following are some methods for assessing attitudes:

Essays. Direct questions that require students to describe feelings or commitments toward their futures in school and/or work are useful. For example, if a student cannot describe a positive action taken regarding his or her future, you might infer that he or she does not have a strong attitude that could lead toward such action.

Interviews. Structured interviews need to be carefully planned so that the student can freely express feelings on predetermined questions. However, even without using predetermined questions (an unstructured interview), you can still gain valuable insights about a student.

Attitude scales. Many types of attitude scales exist—or can be developed. One type is a scale in which students rate how strongly they feel about a statement. Another type asks students to rate two opposing values.

Checklists. Checklists for recording observations are valuable. Locate or develop several in order to focus on specific attitudes.

The approach taken will depend on the particular attitude being assessed, the openness of the student, and the student's behavior pattern. Use various approaches to gain perspective on a given attitude or choose to use the same approach at various times through the year to determine changes in attitude.

In assessing attitudes, remember to safeguard the student's privacy and personal con-

cerns. When students share their concerns, respect their feelings and do not use privileged knowledge to prejudge or undermine them. Also, do not share information with others without the student's permission.

Anecdotal Records

Although anecdotal records are not widely used any more, primarily because of the Family Rights and Privacy Act, they could be somewhat useful in that they relate concise descriptions of significant student behaviors. Keep this recording process as simple as possible. The following suggestions may be useful:

- Record only the most significant behaviors, those items that provide insights.
- Use this technique for all students, not only atypical ones.
- Record incidents as soon as possible after they occur.
- Keep your descriptions objective. Avoid interpretations.
- Use the approach with a variety of other informational sources; too few anecdotes may provide a biased view of the student.

There are several positive and negative features to keeping anecdotal records:

- Students are observed under natural conditions.
- A detailed record—and, hence, detailed insights—can be compiled over time.
- Observations and interpretations must be objective, or the results will be invalid.
- Anecdotes should not be limited to undesirable behaviors.
- Descriptions must be relevant due to the time-consuming nature of this activity.

Other School Records

Records that can facilitate the assessment process are available in the school's administrative or vocational offices. Check these offices to learn the types of information available before scheduling tests or other kinds of assessment to avoid duplication of effort.

Cumulative records often provide information on attendance and punctuality (a possible clue to future work habits). However, these records may not pinpoint students' specific strengths or needs.

Medical and health records document the extent of impairments, physical capacities, and motor skills, as well as the means by which a student compensates (for example, braille, wheelchair, and so forth). Such records may not always have complete information and may simply describe the presence of a mental or physical impairment. Because some impairments go undetected, they may not be recorded.

Part-time and full-time work experience records yield useful information about past job performance, work attitudes, and habits. They likely will be in the form of employer references or performance evaluations.

Individualized educational/employability plans IEPs—used particularly with handicapped students—are extremely useful information sources on academic and vocational performance, social behavior, general education levels, and long- and short-term goals.

Autobiographies

The autobiography, which provides insights into a student's life as he or she sees it, may either be structured or unstructured. In the *structured* autobiography, students are asked to provide a fairly detailed accounting of the following: background; physical and health characteristics; school experience; achievements; hobbies, travel, and leisure activities; work experience—paid and unpaid; educational and career plans; family influences; and aspirations and concerns.

In the *unstructured* autobiography, students are asked to write a more open-ended account of themselves, such as, "What I Want to Be Ten Years from Now." This approach enables students to examine and express in writing their feelings about themselves and about their achievements and ambitions. With this approach, however, it may be more difficult to detect clues that reveal what a student considers to be the truly important aspects of his or her life.

There are several "pluses" for using autobiographies. Securing information in this way requires less time than formal data collection techniques. Information gathered can be compared with information from other sources. The story may contain valuable clues to the student's character and, hence, explain possible causes of problems. Some students' academic abilities may make it difficult for them to write an autobiography; this fact itself is worth knowing. Clues about unrealistic goals or undetected options may be detected.

On the other hand, be alert to cautions. Students may not include all pertinent information or may distort some facts. Conclusions or interpretations may not be reachable based solely on this source of information. The process requires "informed consent" of the students. The process requires cooperation of English teachers.

Conferences with Individual Students

Although informal conferences occur every day, the need arises to confer with students in a structured way. Formally arranged meetings—including counseling interviews—are very useful when extensive preparation is needed to gather information.

Many conferences are based on the recognition that students may need specific help in establishing career goals or preparing for further training. In order to aid students in gaining deeper self-insight, review information gathered as a result of interest inventories. Record what happened as soon as possible and take any action steps agreed upon. Lastly, locate appropriate external resources if outside community help is needed.

Because much of the success in learning about students depends on attitudes, some points to keep in mind are offered below:

- Listen to students with acceptance and respect even if personal views are in disagreement
- Encourage a two-way information exchange.
- Be sincere in showing—and feeling—empathy.
- Respect confidentiality.
- Encourage students to come in and talk, especially when they need to vent their feelings or problems.

Conferences with Parents

In setting up conferences, identify the information needed and how best to get it. A successful conference is a two-way exchange that provides valuable insights into a number of factors related to transitions, such as parents' interpretation of student's goals and aspirations, student's health and emotional well-being, student's outside activities and student's home or job responsibilities. Many times a three-way conference involving parents, student, and school staff is productive. During such conferences, students should be encouraged to give their views about situations and to help clarify and resolve problems.

Conferences with Other Teachers and Counselors

Conferences with colleagues can verify information learned elsewhere. Such information may take on greater significance if it is gathered from a variety of individuals, each with different insights. For example, through combined efforts of colleagues, it may be easier to spot potential dropouts. Also, because students tend to behave differently in different situations, it is helpful to be aware of their behavior patterns and to gain others' views about the reasons for

various behaviors. Questions such as these and others may be helpful to structure colleague conferences.

- Does the student's behavior vary from class to class?
- Does information from others verify your observations?

- Is there a need for additional testing or other data collection?

Last, this activity should not be conducted in the teacher's lounge as a casual conversation. It should be strictly confidential.

Formal Assessment

In addition to informal types of assessment, formal testing programs are obviously an integral part of every school's program. Using, selecting, and administering tests are some of the key issues schools must deal with on a regular basis.

Following Standards for Educational Testing

In order to provide criteria for the evaluation of tests, testing practices, and test use, the American Educational Research Association, the American Psychological Association, and the National Council on Measurement in Education recently revised their *standards for educational and psychological testing* (1985). The group that prepared these standards indicates that the uses of tests in counseling differ from most test uses in that the counseling test taker is the primary user of the results. A number of the most relevant *primary standards** are as follows:

Use Tests in Counseling

Standard 9.1 Testing for counseling should have as its primary goals the acquisition of relevant information and the reporting of that information with appropriate interpretations so that clients from diverse backgrounds can be assisted in making important educational,

personal, and career decisions.

Standard 9.2

Counselors should review the interpretive materials provided to clients to evaluate accuracy, clarity, and usefulness of the materials. Manuals for tests or computer-based interpretations should be evaluated for evidence for the validity of specific interpretations made.

Standard 9.3

Counselors should review technical data and develop a rationale for the decision to use combined or separate norms for females and males in reports to test takers.

Standard 9.4

If a publisher packages tests that are to be used in combination for counseling, the counselor should review the manual for the rationale for the specific combination of tests used and the justification of the interpretive relationships among the scores.

Standard 9.5

Counselors should examine test manuals for any available information about how suggested or implied career options (i.e., the vocational program or occupation sug-

*American Educational Research Association, American Psychological Association, and the National Council on Measurement in Education. *Standards for Educational and Psychological Testing*. Washington, DC: American Psychological Association, Inc., 1985. Copyright 1985 by the American Psychological Association. Reprinted by permission of the publisher and author.

gested by the highest scores on the test) are distributed for samples of the typical respondents of each gender and relevant racial or ethnic groups.

Standard 9.6 Counselors should review the test materials that are provided to the test takers to be sure that such materials properly caution the test taker not to rely on the test scores solely when making life-planning decisions. The counselor should encourage the test taker to consider other relevant information on personal and social skills, values, interests, accomplishments, experiences, and on other test scores and observations.

Standard 9.7 Counselors should encourage multiple valid assessments of an individual's abilities, social skills, and interests.

Standard 9.8 Counselors should review the interpretive materials for ability or interest measures and for other tests that are used with people who are reentering employment or education or changing work settings for their appropriateness for these clients. A counselor should consider the age, experience, and background of the client as they are compared with the characteristics of the norm groups on which the scores are based.

Use Tests with Linguistic Minorities (Limited English Proficient Students)

Standard 13.1 For non-native English speakers or for speakers of some dialects of English, testing should be designed to minimize threats to test reliability and validity that may

arise from language differences

Standard 13.2 Linguistic modifications recommended by test publishers should be described in detail in the test manual.

Standard 13.3 When a test is recommended for use with linguistically diverse test takers, test developers and publishers should provide the information necessary for appropriate test use and interpretation.

Standard 13.4 When a test is translated from one language or dialect to another, its reliability and validity for the users intended in the linguistic groups to be tested should be established.

Standard 13.5 In employment, licensing, and certification testing, the English language proficiency level of the test should not exceed that appropriate to the relevant occupation or profession.

Standard 13.6 When it is intended that the two versions of dual-language tests be comparable, evidence of test comparability should be reported.

Standard 13.7 English language proficiency should not be determined solely with tests that demand only a single linguistic skill.

Use Tests with People Who Have Handicapping Conditions

Standard 14.1 People who modify tests for handicapped people should have available to them psychometric expertise for so doing. In addition, they should have available to them knowledge of the effects of various handicapping conditions on

test performance, acquired either from their own training or experience or from close consultation with handicapped individuals or those thoroughly familiar with such individuals.

Standard 14.2 Until tests have been validated for people who have specific handicapping conditions, test publishers should issue cautionary statements in manuals and elsewhere regarding confidence in interpretations based on such test scores.

Standard 14.7 Those who use tests and those who interact professionally with potential test takers with handicapping conditions (e.g., high school guidance counselors) should (a) possess the information necessary to make an appropriate selection of alternate measures, (b) have current information regarding the availability of modified forms of the test in question, (c) inform individuals with handicapping conditions, when appropriate, about the existence of modified forms, and (d) make these forms available to test takers when appropriate and feasible.

Standard 14.8 In assessing characteristics of individuals with handicapping conditions, the test user should use either regular or special norms for calculating derived scores, depending on the purpose of the testing. Regular norms for the characteristic in question are appropriate when the purpose involves the test taker's functioning relative to the general population. If available, however, special norms should be selected when the test takers' functioning relative to their handicapped peers is at issue.

Using Standardized Tests

Those who have been teaching or serving as counselors for some time, undoubtedly have developed some of their own tests for determining student competencies. However, locally-constructed tests are not meant to replace standardized ones that measure general ability, achievement, aptitudes, and interests.

Teachers and counselors fortunately have a wide variety of standardized tests from which to choose. Most of the commonly used tests fall into one of four categories. Here is a brief look at each:

General ability tests. These instruments that attempt to measure a student's overall ability to learn are also called intelligence, scholastic aptitude, or mental maturity tests. Some are administered individually and can only be given by a certified psychologist with permission of the student's parents. Others are given to groups by teachers or counselors. Some commonly used group tests include the California Short-Form Test of Mental Maturity, Henmon-Nelson Test of Mental Ability, Otis-Lennon School Ability Test, and the Test of Cognitive Skills.

Achievement tests. Whereas general ability tests estimate how much a student can learn if ideal conditions prevail, achievement tests indicate how much a student has learned in specific areas. There are two basic types: survey and diagnostic. Survey tests can be particularly helpful in pointing out group needs and general areas of weakness in an individual student's learning. Examples include the California Achievement Test, the Iowa Tests, and the Metropolitan Achievement Test. Diagnostic tests focus on an individual's strengths and weaknesses in a particular area. The Stanford Diagnostic Arithmetic Test and the Durrell Analysis of Reading Difficulty are two examples.

Aptitude batteries. Aptitude batteries provide a basis for estimating an individual's ability—with training—to acquire knowledge or skill in a variety of areas. Commonly used aptitude batteries include the General Aptitude Test Battery, the Differential Aptitude Tests, and the Armed Services Vocational Aptitude Battery.

Interest inventories. Standardized interest inventories help students identify their preferences for particular activities. Suggestions are then made of the occupations or occupational clusters which most closely match one's interests. Some widely used surveys include the Kuder, Ohio Vocational Interest Survey, Strong-Campbell Interest Inventory, Career Assessment Inventory, and the Harrington-O'Shea Career Decision-Making System.

A variety of other instruments are used in many systems. For example, career maturity tests, work values scales, temperament/style inventories, and vocational evaluation systems are available and often are useful supplements in counseling programs.

Selecting Assessment Instruments

When selecting assessment instruments, several points should be kept in mind: purposes, student characteristics, and pluses and minuses.

Purposes. Because every test has its own special uses and limitations, be familiar with the tests and the students. Have good reasons why a particular test is selected.

Student characteristics. The students' background and literacy level should influence selection. Some instruments can better accommodate a particular student's characteristics. Because several tests likely will be needed, a range of tests should be available. Two questions to ask are: What information is needed? What tests will provide this information?

Pluses and minuses. Analyze the strengths and weaknesses of the tests being considered. When compared to locally constructed tests, standardized tests require no staff time for development. Many yield scores that can be compared with those of other groups. However, be aware of the problems inherent in these tests. Some shortcomings are as follows:

- Individual items may be at a relatively high reading level and may reflect cultural content of which the students may have little or no knowledge.

- Most of these tests are similar to classroom tests with which some students have a history of failure and which, therefore, may produce anxiety.
- Some tests have written directions at a higher reading level than that of the test taker.
- Some students have limited experience with tests of any kind; they lack "test wiseness."

Test experts also agree that a good test has the following characteristics:

- *It must be valid.* To the extent that a test measures what it is supposed to, it is valid.
- *It should be reliable.* Reliability is the consistency with which a test measures. Test experts indicate that a valid test is always reliable; that is, it consistently measures what it is supposed to measure. In fact, test developers treat reliability as a part of validity. It is important to know that a test can be reliable (can get a consistent measurement) even if it is not valid (does not measure what it is intended to measure).
- *It should be free of bias.* It should be sensitive to data on reliability, validity, and norms. The purpose of test standardization is to establish an objective instrument that measures or predicts behavior. Such standardization enables the user to compare individual test scores with a norm and to eliminate factors that would create test bias. Because no test is completely bias-free, it is important to examine with what groups the norms were established.
- *It should be usable.* No matter how valid or reliable a test is, it will be of little use if it is unreasonably difficult or time-consuming to administer or score. While a final examination with 500 objective items could be valid and reliable, such a test might take so long to administer and score that it simply might not be practical or useful.
- *It should be appropriate for the intended target group.*

Using Tests That Measure Student Competencies

The concepts of grade levels and competency levels are discussed in the literature and should be considered carefully. For example, the reporting of reading and math skills on the basis of grade levels often is viewed by many as a poor approach to testing. However, an alternative does exist, namely, using tests based on the actual skills required by specific occupations. This is especially helpful if results are used to place students in a job or in a skills training program. In order to assess occupationally related competencies, the tests should reflect those competencies. Competencies—both skills and attitudes—can be identified with significant input from potential employers who probably know better than anyone else what is essential for someone who wishes to work in a specific job.

A number of advantages are evident for using an occupationally relevant approach to testing. First, the use of such tests usually indicates the parallel use of an individualized, competency-based approach. It also is reasonable to assume that the development of such instruments would be done in conjunction with the development of individualized, competency-based skills training. Another advantage is that it allows students to begin training at the appropriate level rather than at one they may have surpassed.

Administering Tests

Two of the most important tasks of administering tests are creating a favorable environment and lessening any fears of testing that many students will have.

Create a favorable environment. The physical environment should allow students to concentrate. The room should be free from distractions. The temperature should be comfortable; the lighting should be good; and the ventilation should be sufficient to keep the air fresh. The environment also includes psychological factors. Some students become anxious, whether or not they know the material being tested. Students also may be apprehensive because the test may be a new kind for them—perhaps their

first essay. You will be able to minimize apprehension by making the environment nonthreatening.

Other important tasks for anyone who administers tests are as follows:

- Read the manual; this is essential if it is the first time the test is being used.
- Take the test. Read the directions, see how to mark the answers, and note the time limits.
- Have all materials ready for quick distribution.
- Read the directions clearly and distinctly.
- Make sure the students know what they are to do before they begin.
- Allow time for questions.
- Follow timing procedures.
- Observe the test takers. Make certain that they understand instructions, that they are on the correct page, and that their answers are in the right places.

Lessening students' fear of testing. In addition to providing encouragement, here are some suggestions that should help to alleviate students' fears.

Explain the procedures. Make sure students understand what they will be expected to do, how they should approach the test, and how the tests will be scored.

Make it a positive experience. Show students how to use feedback to improve their performance. Help them understand that the results allow you and the student to pinpoint and correct difficulties. Also, praise students in the work they have done. Recognition of a task well done can bolster self-confidence.

Use practice tests. In working with students who have difficulty understanding what is being taught, practice tests often are useful. Slower learners particularly are helped by frequent exposure to the same material. Repetition in

practice tests reinforces what students are learning. These tests also reduce students' fears by allowing them to review in advance what will be covered.

Have students self-assess. Most students have a strong desire to know how they are doing at all times. They can be motivated by being permitted to check their own progress. To do this, give them guidelines for self-assessment—clear directions for objective self-assessment and specific assessment criteria with indicators of successful task completion.

Using Test Results

Interpreting and communicating test results are two essential tasks that must be considered.

Interpreting test results. The proper interpretation of test scores begins with understanding the basic characteristics of tests. Given this, interpretation entails knowing about administering and scoring tests, norms, reliability, and validity. Such information can be obtained by studying the test manual.

Communicating the test results. Communication—feedback—consists of reporting data so that it is understandable, informative, and useful. Be concerned about the user's need for the information and the purposes of evaluating

its significance. Also, be concerned about the right of the student to be informed regarding who—if anyone—will have access to the results as well as the proper safeguards for preventing misuse.

Teachers and counselors should consider the following when communicating test results:

- *Share the results with students, explain what they mean, and together consider how they might relate to the student's future goals.* The importance of feedback cannot be overemphasized. Provide students with information that enables them to make better judgments about themselves. During the debriefing, students may provide additional information that will help in understanding the results.
- *Use the results with appropriate caution and do not overgeneralize.* Tests, like other tools, need to be handled with care. Keep in mind that results should not be permitted to limit unnecessarily the options available. Many tests are reasonably good measures of the "threshold ability" to perform particular tasks. Some test experts note that scores beyond this "threshold" have limited capacity to predict work or training performance. Also, relate the test results to other sources of information, putting the test results in perspective.

Resources for Assessment Programs

Because hundreds of tests are available, it can be mind-boggling to sort out the field. The following 50 brief descriptions of career-related instruments are obviously only a few of those available. In Table 1—found at the end of the list—the instruments are categorized according to two criteria: what is measured by the instrument and how is the instrument administered. *What is Measured* has 12 categories: aptitudes (APT), career attitudes (ATT), career development (CD), experience and background information (EXP), interests (INT), occupational knowledge (OK), personality (PER), academic skills (SK-AC), career decision making and job search skills (SK-CD), occupational and job related skills (SK-OCC), work temperaments (TEM), and work values (VAL). *How is the*

Instrument Administered has five categories: card sort, computer, apparatus, paper and pencil, and work sample. This relatively small sample should be used only as a "starter list" in that it is based upon only a few of the important variables to be used when selecting tests (what is measured and how the instrument is administered). No assessment of the quality of the instrument, administration time, reading level, or scoring procedures was made.

For more information about assessment instruments, the following resources should be helpful:

- Mitchell, James V., Jr., editor. *Ninth Mental Measurements Yearbook*. Two volumes.

Lincoln: University of Nebraska Press and the Buros Institute of Mental Health Measurement.

This resource provides the most comprehensive information on tests (e.g., information about each test includes the title, description of the groups for which the test is intended, date, forms, costs, scoring and reporting services, administration time, and publisher). References to published articles, books, and unpublished theses on the construction, validity, use and limitations of each test are reported, as are reviews of each test by independent experts.

- Mitchell, James V., Jr., editor. *Tests in Print III*. Two volumes. Lincoln: University of Nebraska Press and the Buros Institute of Mental Health Measurement, 1983.

This companion volume to the yearbooks provides similar—but less detailed—information. It includes a bibliography of all known tests and an index to tests published in previous editions of the *Mental Measurements Yearbook*.

- Kapes, Jerome T. And Mastie, Marjorie M., editors. *A Counselor's Guide to Vocational Guidance Instruments*. Alexandria, VA: The National Career Development Association, 1982.

The guide reviews 40 instruments in detail, including multiple aptitude batteries, interest inventories, measures of work values, career development/materials, combined assessment programs, card sorts, and instruments for special populations. (Note: After September 1987, the National Career Development Association will publish *A Counselor's Guide to Career Guidance*. Volume II. Instruments by Kapes and Mastie.)

- Vetter, L.; Hull, W.; Putzstuck, C.; and Dean, G. *Adult Career Counseling Resources for Program Planning and Development*. Bloomington, IL: Meridian Education Corporation, 1986.

Includes 76 instrument descriptions—many of which are appropriate for youth. Each description includes the purposes, primary user population, technical information, and advantages and disadvantages.

- Keyser, D. J. and Sweetland, R. C., editors. *Test Critiques*. Five volumes. Kansas City, MO: Test Corporation of America, 1985 and 1986
- Educational Testing Service (ETS) *Test Collection Database*.

This file is a searchable database through the Bibliographic Retrieval Service (BRS), a commercial vendor of databases. It includes over 7,500 test records describing instruments used to evaluate achievement, aptitudes, attitudes, and the like. The database also includes an abstract of each instrument plus supplementary information on the number of test items, time needed to administer the test, grade levels, and the like.

For more information on the ETS collection, contact—

Educational Testing Service
Rosedale Road
Princeton, New Jersey 08541
(609) 921-9000

For more information on how to search BRS, contact—

Customer Services
Bibliographic Retrieval Service
1200 Route 7
Latham, NY 12110
(518) 783-1161

Brief Description of Assessment Instruments

1. *Apticom*

Apticom—designed to assess aptitudes, job interests, and math and language skills—is a microcomputer assessment instrument that is

administered to one person at a time. It consists of three major components: an Aptitude Test Battery, Occupational Interest Inventory, and Educational Skills Development Battery. It is useful in career guidance in that it can help identify individuals who are or are not college bound. Because of its link to the *Dictionary of Occupational Titles* and the *Guide for Occupational Exploration*, extensive occupational data is available for exploration.

Availability: Vocational Research Institute, 2100 Arch Street, Philadelphia, PA 19103

2. The ANSER System, Self-Administered Student Profile (Form 4)

This profile integrates data in the areas of health, education, development, and behavior in order to assess school adjustment or learning problems. Compiled data can be used with direct assessments, including achievement tests and health and developmental assessment. It also may be used to formulate Individualized Educational Plans. The form covers skills, interests, and perceptions of degree of ability in school, sports, cognitive ability, and social skills.

Availability: Educators Publishing Service, 75 Moulton Street, Cambridge, MA 02238

3. Armed Services Vocational Aptitude Battery (ASVAB-14)

The ASVAB-14 assists in identifying aptitudes and developing educational and career plans. It provides a measure of learning potential in academic, verbal, and math abilities and is an excellent aptitude battery for younger adults. It also provides an estimate of general ability and some career exploration opportunities in the handouts included in the manual. The testing is done only by representatives of the Armed Services.

Availability: U.S. Military Entrance Processing Command, 2500 Green Bay Road, North Chicago, IL 60064

4. Bennett Mechanical Comprehension Test

This sensory-mechanical test measures the ability to perceive and understand the relationship of physical forces and mechanical elements. The test—for use in conjunction with other assessment tools—may be most useful when given with clerical aptitude and manual dexterity tests in order to predict current performance in selected mechanically oriented occupations.

Availability: The Psychological Corporation, 757 Third Avenue, New York, NY 10017

5. Career Assessment Inventory (CAI)

The CAI is designed for individuals who want immediate career entry or for those who want careers that require minimum postsecondary training. Student interests are compared to workers in occupations requiring less than a four-year college education. The CAI includes three categories: activities, school subjects, and occupational titles.

Availability: NCS Professional Assessment Service, P.O. Box 1416, Minneapolis, MN 55440

6. Career Decision-Making System (CDM)

The CDM—a vocational interest inventory—compares occupational interests with five related areas: occupational preferences, school subject preferences, future education plans, job values, and abilities. Because an audio tape is available for use with slow learners, the test is appropriate for some special populations. A Spanish edition also is available.

Availability: American Guidance Service, Publisher's Building, Circle Pines, MN 55014-1796

7. Career Development Inventory (CDI)

The CDI assesses attitudes, knowledge, and skills relating to career development and vocational maturity as well as individual readiness to

make pre-occupational and vocational decisions. The CDI is appropriate as a diagnostic tool in individual career counseling.

Availability: Consulting Psychologists Press, Inc., 577 College Avenue, Palo Alto, CA 94306

8. *Career Maturity Inventory: Second Edition*

This inventory provides information on the attitudes and competencies which are important for making mature career decisions. There are two parts to the complete test, the Attitude Scale and the Competence Test. The Attitude Scale comes in two forms: Screening and Counseling. The Screening Form A-2 gives only an overall measure of the five combined variables; it is useful for screening or survey purposes. The Counseling Form B-1 gives a score for each variable and is thus useful for counseling. Both forms of the Attitudes Scale use the true-false format.

Availability: CTE/McGraw Hill, Del Monte Research Park, Monterey, CA 93940

9. *Career Planning Program (CPP)*

The CPP—a guidance-oriented assessment system—collects and integrates information relating to career planning. It is designed to identify and explore occupations and educational programs. CPP is a paper-and-pencil test measuring interests, experiences, abilities, and self-ratings of abilities. It also includes a Background and Plans Unit containing 17 items for recording relevant personal data.

Availability: American College Testing Program, P.O. Box 168, Iowa City, IA 52240

10. *Career Values Card Sort (CVCS)*

The CVCS assists in the process of values clarification. It helps individuals in defining factors which affect their career satisfaction and in determining areas of conflict and congruence. This information then can be applied to career decision making. The CVCS is an excellent values clarification instrument useful in any career guidance setting.

Availability: Career Research and Testing, 1190 Bascom Avenue, San Jose, CA 95128

11. *Comparative Guidance and Placement Program (CGP)*

The CGP—a battery of tests measuring achievement and special abilities—is designed to assist in evaluating and counseling students entering 2-year institutions. It consists of two inventories and six tests. The inventories are the Student Biographical Inventory and the Comparative Interest Index which contains 11 scales. The achievement tests are mathematics, sentences, and reading. The tests of special abilities are on integrative reasoning, perceptual speed and accuracy, and inductive reasoning.

Availability: Multiple Assessment Programs and Services (MAPS) of the College Board, CN 6725, Princeton, NJ 08541-6725

12. *Computer Aptitude, Literacy, and Interest Profile (CALIP)*

The CALIP assesses computer-related abilities essential for a wide variety of computer-related occupations. The six subtests are Estimation, Graphic Patterns, Logical Structure, Series, Interest, and Literacy. The instrument was designed to identify minorities, women, reading disabled, and others who might lack opportunity to demonstrate aptitude for computer-related occupations, broaden the range of career options in the career decision-making process, and document progress in training.

Availability: PRO-ED, 5341 Industrial Oaks Blvd., Austin, TX 78735

13. *Dailey Vocational Tests*

The Dailey Vocational Tests measure potential for a wide range of occupations in trade, technical, and business-secretarial fields. The tests—administered separately or as a battery—are the Technical and Scholastic Tests, the Spatial Visualization Test, and the Business English Test.

Availability: The Riverside Publishing Company, 8420 Bryn Mawr Avenue, Chicago, IL 60631

14. *Differential Aptitude Tests (DAT)*

The DAT—a battery of aptitude tests—is designed to assist in educational and vocational guidance. The eight tests are: Verbal Reasoning, Numerical Ability, Abstract Reasoning, Clerical Speed and Accuracy, Mechanical Reasoning, Space Relations, Spelling, and Language Usage. The battery is useful in exploring academic and vocational opportunities, especially when used with the DAT Career Planning Program.

Availability: The Psychological Corporation, 7500 Old Oak Boulevard, Cleveland, OH 44130

15. *Flanagan Industrial Tests (FIT)*

The FIT measures skills considered critical for performance in a wide variety of jobs. Its primary use is for selecting personnel to perform certain jobs. FIT consists of 18 subtests: arithmetic, assembly, components, coordination, electronics, expression, ingenuity, inspection, judgment and comprehension, mathematics and reasoning, mechanics, memory, patterns, planning, precision, scales, tables, and vocabulary.

Availability: Science Research Associates, Inc., ISED Marketing/9th Floor, 155 North Wacker Drive, Chicago, IL 60606

16. *General Aptitude Test Battery (GATB)*

The GATB—a measure of aptitudes required for occupational success—is a combined paper-and-pencil and apparatus test measuring General Learning Ability, Verbal, Numerical, Spatial, Form and Clerical Perception, Motor Coordination, and Finger and Manual Dexterity. Testing must be done by the U.S. Bureau of Employment Services or a certified examiner.

Availability: U.S. Government Printing Office, Washington DC 20402

17. *General Clerical Test (GCT)*

The GCT—a group administered pencil-and-paper test—is designed to measure aptitudes important in clerical work. Its purpose is to predict employment or training success. The test

can be used in vocational evaluation situations to assess one's overall ability for this type of work.

Availability: The Psychological Corporation, 757 Third Avenue, New York, NY 10017

18. *Gordon Occupational Check List II (GOCL II)*

The GOCL II assists individuals in identifying occupations appropriate to their interests and abilities. It is designed specifically for students who are not college bound or are non-professionally oriented. Each item is an activity related to a specific occupation in one of six interest categories: Business, Outdoor, Arts, Technology-Mechanical, Technology-Industrial, and Service. The GOCL II—written on a sixth-grade reading level—does not include occupations which require advanced training and is appropriate for those with low reading ability.

Availability: The Psychological Corporation, 7500 Old Oak Boulevard, Cleveland, OH 44130

19. *Hall Occupational Orientation Inventory*

The purpose of this inventory is instruction rather than measurement. The focus is on work-related behaviors. Its intent is to expand career options and self-awareness. The young adult version has 22 scales consisting of 10 items each. The scales can be classified by wants and needs, job characteristics, worker traits, and defensiveness.

Availability: Scholastic Testing Service, Inc., 480 Meyer Road, Bensenville, IL 60106

20. *Hand-Tool Dexterity Test*

The purpose of this test is to provide a measure of proficiency in using ordinary mechanics' hand-tools. While this individually administered apparatus test is untimed, most examinees complete it in between five and 20 minutes. Because no reading ability is required and because the manual permits the administrator to supplement the directions to improve the examinee's understanding of the task, literacy

and difficulty in understanding instructions should not be problems. The test requires full use of hands and arms and may not be appropriate for people with an upper-extremity handicap.

Availability: The Psychological Corporation, 757 Third Avenue, New York, NY 10017

21. *Industrial Reading Test (IRT)*

The IRT—a test of reading ability—is used to determine the ability to read written technical and instructional materials. The test may be especially useful in vocational/technical programs for measuring students' reading ability. Because this test is used by business and industry, it also can assist teachers in preparing students for work.

Availability: The Psychological Corporation, 7500 Old Oak Boulevard, Cleveland, OH 44130

22. *Job Analysis and Interest Measurement (JAIM)*

This self-description inventory measures coping skills important to performance and satisfaction in work roles. It is designed to measure factors such as "getting along" (coping) by determining the degree of match between requirements and potentials of jobs and the individual's self-reported behavior styles, activity preference, and values. Potential uses include individual counseling (comparing oneself to scores of a norm group and scores in a wide range of occupations), estimating job requirements and satisfaction potential of particular jobs, and personnel decisions.

Availability: JAIM Research, Inc., 1808 Collingwood Road, Alexandria, VA 22308

23. *Knowledge of Occupations Test*

This test is designed to measure the extent to which high school students have knowledge of occupations. Its function is to provide information for counselors and students. A high score on the test does not guarantee success in an occupation, nor does a low score guarantee

failure. However, the counselor should make certain that students scoring low have accurate information on which they are basing their plans.

Availability: Psychologists and Educators, Inc., Jacksonville, IL 62650

24. *Kuder Occupational Interest Survey Form DD (KOIS-DD)*

This survey is used to identify occupational interests in order to narrow occupational fields from which a student may choose. The occupation scales include occupations that do not require 4-year degrees. The KOIS is written at the sixth-grade reading level and because the scales are not limited to occupations requiring college training, it can be used with a variety of individuals.

Availability: Science Research Associates, Inc., ISED Marketing/9th Floor, 155 North Wacker Drive, Chicago, IL 60606

25. *Minnesota Importance Questionnaire (MIQ)*

The MIQ measures 20 psychological needs. The needs can be defined as the specific conditions in a work environment that are considered important to job satisfaction. MIQ is useful in identifying the types of occupations students find most satisfying. The needs profile also might be used to help students identify satisfying ways to spend nonwork time. This might be especially valuable when, because of a disability or other reasons, students are limited in their occupational choices.

Availability: Vocational Psychology Research, University of Minnesota, N620 Elliott Hall, 75 East River Road, Minneapolis, MN 55455

26. *Missouri Occupational Card Sort (MOCS)*

The MOCS assists in expanding the range of information about oneself and occupations and is intended to further self and career exploration. MOCS contains more occupational information than most card sorts and also is one of

the least expensive. Because there are no additional materials, this card sort requires additional counselor involvement. The MOCS occupations are more relevant to those individuals interested in training beyond high school. Only 45 of the 180 occupations require high school or less.

Availability: Career Planning and Placement Service, 100 Noyes Hall, University of Missouri, Columbia, MO 65211

27. Missouri Occupational Preference Inventory (MOPI)

The MOPI assists in understanding reasons behind occupational choice and guiding further career exploration. It is a card sort consisting of 180 occupations subdivided by educational requirements: high school, beyond high school, and college. The card sort has a large number of cards and occupational information. Because of the large number of occupations, cards can be preselected, omitting occupations that are not applicable.

Availability: Human Systems Consultants, Inc., 110 North Tenth Street, Suite 7, Columbia, MO 65201

28. Myers-Briggs Type Indicator (MBTI)

MBTI was designed to identify an individual's basic preferences by measuring personality dispositions and interests. It contains 166 items in four indices: Introversion-Extraversion, Sensing-Intuition, Thinking-Feeling, and Judging-Perceptive. The MBTI is based on the theory that occupations attract particular types and that similar occupations have similar types. (Note: administration of this test requires special training.)

Availability: Consulting Psychologists Press, 577 College Avenue, Palo Alto, CA 94306

29. Nonreading Aptitude Test Battery (NATB)

NATB—the nonreading version of GATB—is designed to test the major aptitudes required for occupational success. It contains 14 subtests that measure these aptitudes: intelligence; ver-

bal, numerical, and spatial aptitudes, form and clerical perception, motor coordination; and manual and finger dexterity. The NATB is appropriate for the severely disadvantaged and mentally retarded as well as nonreaders. Testing must be done by the U.S. Bureau of Employment Services or a certified examiner.

Availability: U.S. Government Printing Office, Washington, DC 20402

30. Non-Sexist Vocational Card Sort (NSVCS)

The NSVCS assists in vocational exploration. Feelings, values, needs, interests, and life-style preferences are examined as they relate to both work and leisure. The occupational descriptions are a summary of job duties and responsibilities according to the *Dictionary of Occupational Titles* or professionals working in a given field. Since the NSVCS attempts to counteract sex bias in vocational exploration, it is useful in expanding career options.

Availability: NSVCS, Route 4, Box 217, Gainesville, FL 32601

31. Occupational Interests Card Sort (OICS)

The Occupational Interests Card Sort assists individuals in identifying and clarifying lines of work having high appeal for them. The card sort and supplementary materials provide an opportunity to examine one's thoughts and feelings about occupations. The card sort offers a structured starting point in career exploration, especially for those unsure of a career direction.

Availability: Career Research and Testing, 1190 South Bascom Avenue, San Jose, CA 95128

32. Occ-U-Sort (O-U-S)

The O-U-S looks at motives and self-perceptions in relation to career needs and attempts to broaden the range of career options. It contains 3 sets of 60 cards each, requiring increasing levels of education. Because the O-U-S identifies different levels of education required by occupations, it is helpful in determining educational goals. The O-U-S also provides thorough program materials for students.

Availability: Publishers Test Service, 2500 Garden Road, Monterey, CA 93940

33. *Ohio Vocational Interest Survey (OVIS II)*

The OVIS II—an interest inventory—is designed to assist students in career exploration and vocational and educational planning by assessing interests in 24 occupational clusters. Because of its direct link to the *Dictionary of Occupational Titles* and *Guide for Occupational Exploration*, the OVIS II provides excellent occupational information. The supplementary materials can be adapted for use with special populations, that is, nonreaders or poor readers.

Availability: The Psychological Corporation, 7500 Old Oak Boulevard, Cleveland, OH 44130

34. *Personal Career Development Profile (PCDP)*

The PCDP—a computer-generated report of the Sixteen Personality Factor Questionnaire (16 PF)—is designed to organize information about individual strengths, behavioral attributes, and gratifications. Intended to supplement career guidance and personal development counseling, PCDP provides relevant information regarding career interests, work-setting preferences, and patterns of interaction. An Occupational Comparisons Listing is based on the person's leadership score. Two listings are available: professional-managerial, for those with above average leadership scores; and professional-technical, for those with below average leadership scores.

Availability: Institute for Personality and Ability Testing, 1602 Coronado Drive, P.O. Box 188, Champaign, IL 61820

35. *Picture Interest Exploration Survey (PIES)*

PIES—a career interest inventory presented in a visual, nonreading format—is designed to help in the investigation of individuals' vocational interests and to apply this information to pursuing career goals. The career-cluster system is based on the *Occupational Outlook Handbook*

and is cross-referenced to the *Dictionary of Occupational Titles*.

Availability: Education Achievement Corporation, P.O. Box 7310, Waco, TX 76710

36. *Program for Assessing Youth Employment Skills (PAYES)*

PAYES—a battery of seven tests designed specifically for use with disadvantaged youth—consists of three separate booklets: Booklet 1 contains three attitudinal measures; Booklet 2, three cognitive measures; and Booklet 3, a vocational interest inventory. Job-holding skills, attitude toward supervision, and self-confidence are the three major attitude areas covered. Cognitive measures of job knowledge, job-seeking skills, and practical reasoning also are surveyed. The measures are designed for adolescents and young adults with low verbal skills; the pictures help clarify many of the questions presented.

Availability: Cambridge Book Company, 888 Seventh Avenue, New York, NY 10019

37. *Self-Description Inventory (SDI)*

The SDI—a personality inventory—is designed specifically for vocational counseling to complement information from other ability and interest measures. The inventory consists of 200 items. The items are adjectives used in describing people (e.g., bossy, fussy, etc.). The SDI is not intended for use as a complete assessment instrument but rather as an adjunct to other inventories.

Availability: NCS Professional Assessment Service, P.O. Box 1416, Minneapolis, MN 55440

38. *Self-Directed Search (SDS)*

The SDS is an evaluation of abilities and interests and their relationship to each of six occupational or personality types—realistic, investigative, artistic, social, enterprising, and conventional. One item, the 16-page *Assessment Booklet* is used to evaluate abilities and interests. The *Occupations Finder*—an eight-

page booklet—is designed to provide students opportunities to look at areas of work that correspond with their interests. The booklet has descriptive codes for about 500 occupations; the student then identifies types of occupations for exploration.

Availability: Psychological Assessment Resources, Inc., P.O. Box 98, Odessa, FL 33556

39. *Strong-Campbell Interest Inventory (SCII)*

The Strong-Campbell Interest Inventory measures interests by comparing them to interests of people working in a variety of occupations. By using these results, students can begin to identify long-range goals and occupational choices. The SCII, a 325-item inventory, contains seven parts: Occupations, School Subjects, Activities, Leisure Activities, Types of People, Preference Between Two Activities, and Your Characteristics. It is useful for individuals who need career guidance and is most appropriate for those who are considering a business or professional occupation. Because of this emphasis, the SCII would not be as useful to some groups as other career planning instruments might be.

Availability: Consulting Psychologists Press, Inc., 577 College Avenue, Palo Alto, CA 94306

40. *Survey of Interpersonal Values (SIV)*

The SIV is designed to measure the relative strength of six interpersonal relationship values. It can be used in personal and career counseling. The results are scored on six scales: support, conformity, recognition, independence, benevolence, and leadership. These scales represent values important to an individual's interpersonal relationships. The scales are indicators of personal, social, and occupational adjustment.

Availability: Science Research Associates, ISED Marketing/9th Floor, 150 North Wacker Drive, Chicago, IL 60606

41. *Talent Assessment Program (TAP)*

TAP assesses functional vocational aptitudes and relates them to training and job areas. It is a battery of 10 tests measuring dexterity, visual and tactile discrimination, and memory. Results can be linked to the *Dictionary of Occupational Titles* and *Occupational Outlook Handbook*. A major advantage of TAP is that it involves no reading and can, therefore, be used with nonliterate persons. With modification, it can also be used with the handicapped.

Availability: Talent Assessment, Inc., P.O. Box 5087, Jacksonville, FL 32207

42. *Temperament and Values Inventory (TVI)*

The TVI measures individual differences in temperament and work values. The temperament scales describe individual reactions to activities and situations; the values scales measure those aspects of a job individuals find most rewarding. One advantage is the format: it is easy to administer and complete. The reading level is approximately eighth grade; items are geared toward ninth grade through adult. The manual recommends that the TVI be used only with those groups.

Availability: NCS Professional Assessment Service, P.O. Box 1416, Minneapolis, MN 55440

43. *VALPAR Component Work Sample System (VCWS)*

VALPAR work samples assess vocational and functional skills and assist in evaluating motor skills and thought processes relating to specific job tasks. The system contains 16 work samples that assess skills that include use of small tools, size discrimination, sorting, clerical, assembly, coordination, and range of motion. It can be used with almost any population. Modifications are available for use with blind and deaf persons on some of the samples. It is especially appropriate for those with limited reading skills and the physically disabled.

Availability: VALPAR Corporation, 3801 East 34th Street, Tucson, AZ 85713

44. *Vocational Exploration and Insight Kit (VEIK)*

The VEIK is designed to encourage self-exploration and self-understanding and to facilitate the vocational decision-making process. It is a 15-step process beginning with the Vocational Card Sort. It uses the Self-Directed Search, its interpretive booklet *Understanding Yourself and Your Career*, and an Action Plan.

Availability: Consulting Psychologists Press, 577 College Avenue, Palo Alto, CA 94306

45. *Vocational Information and Evaluation Work Samples (VIEWS)*

VIEWS is designed for the evaluation of the vocational potential of mentally retarded persons and for recommending training and work programs. It consists of 16 work samples organized into 6 Worker Trait Group Arrangements found in the *Dictionary of Occupational Titles*. It focuses on jobs which could be held by mentally retarded persons. Samples evaluate ability in elemental-handling, clerical-checking, sorting, machine-tending, and craftsmanipulating.

Availability: Vocational Research Institute, Jewish Employment and Vocational Service, 1700 Sansom Street, Philadelphia, PA 19103

46. *Vocational Interest, Temperment, and Aptitude System (VITAS)*

The VITAS—a work sample system assessing functional skills to assist in vocational training and placement planning—contains 21 work samples including assembly, filing, sorting, collating, weighing, calculating, and proofreading. The process has five steps: an orientation interview, administration of work samples, motivational group session, vocational interest interview, and final report.

Availability: Vocational Research Institute, Jewish Employment and Vocational Service, 1700 Sansom Street, Philadelphia, PA 19103

47. *Wide Range Interest-Opinion Test (WRIOT)*

WRIOT uses line drawings rather than narrative in assessing the strengths of interests and opinions or value orientations; it associates these interests and attitudes with related job titles. The WRIOT consists of 150 sets of 3 drawings depicting work activities. From each triad, individuals choose their most preferred and least preferred activities. Specific choices of items may be useful for planning or in situations where written tests are inappropriate.

Availability: Jastak Associates, Inc., 1526 Gilpin Avenue, Wilmington, DE 19806

48. *Word and Number Assessment Inventory (WNAI)*

The WNAI assesses verbal and numerical aptitudes and relates them to educational levels and occupational areas; it also indicates how these skills may be improved. The WNAI is written at an eighth-grade reading level and is simple to administer either individually or to groups. The word section consists of 50 synonyms in a multiple-choice format; the number section contains 30 math problems and also is multiple choice.

Availability: NCS Professional Assessment Service, P.O. Box 1416, Minneapolis, MN 55440

49. *Work Values Inventory (WVI)*

The WVI, a self-report inventory, is designed to measure work satisfactions in two ways: satisfactions sought in work and those that may be an outcome. The inventory requires careful thought about work values and their relationship to actual jobs but does not offer occupational information. Whereas individuals will need to make their own "connections," examination of work values may guide them in career planning.

Availability: The Riverside Publishing Company, 8420 Bryn Mawr Avenue Chicago, IL 60148

50. *World of Work Inventory (WOWI)*

The WOWI inventory measures three areas: career interests, job-related temperament factors, and aptitude-achievement. It identifies specific occupations consistent with the individual's interest, temperaments, and aptitudes. Items are matched to actual occupations and not to people employed in those occupations.

The inventory was designed as a multipurpose instrument. Results are useful in career exploration, decision making, and selection of education/training programs. Additional materials such as the profile and occupational exploration worksheets encourage career planning.

Availability: World of Work Inc., 2923 North 67th Place, Scottsdale, AZ 85251

TABLE 1
SURVEY INSTRUMENT SUMMARY

No	Instrument	What is Measured?												How is the Instrument Administered?
		APT	ATT	CD	EXP	INT	OK	PER	SK-AC	SK-CD	SK-OCC	TEM	VAL	
1	APTICOM	X				X			X					Computer
2	The ANSER System, Self Administered Student Profile (Form 4)					X		X	X					Paper and pencil
3	Armed Services Vocational Aptitude Battery (ASVAB-14)	X												Paper and pencil
4	Bennett Mechanical Comprehension Test										X			Paper and pencil
5	Career Assessment Inventory (CAI)					X								Paper and pencil
6	Career Decision Making System (CDM)			X		X								Paper and pencil, optional audio tape
7	Career Development Inventory (CDI)			X										Paper and pencil
8	Career Maturity Inventory Second Edition		X	X						X				Paper and pencil
9	Career Planning Program (CPP)				X	X					X			Paper and pencil

KEY APT = aptitude
 ATT = work attitudes
 CD = career development
 EXP = experience and background information
 INT = interests
 OK = occupational knowledge
 PER = personality

 SK-AC = academic skills
 SK-CD = career decision making and job search skills
 SK-OCC = occupational and job related skills
 TEM = work temperaments
 VAL = work values

Table 1—Continued

No.	Instrument	What is Measured ^a												How is the Instrument Administered?
		APT	ATT	CD	EXP	INT	OK	PER	SK-AC	SK-CD	SK-OCC	TEM	VAL	
10	Career Values Card Sort (CVCS)												X	Card sort
11	Comparative Guidance and Placement Program (GCP)				X	X			X		X			Paper and pencil
12	Computer Aptitude, Literacy and Interest Profile (CALIP)	X				X					X			Paper and pencil
13	Dailey Vocational Tests	X									X			Paper and pencil
14	Differential Aptitude Tests (DAT)	X												Paper and pencil
15	Flanagan Industrial Tests (FIT)	X									X			Paper and pencil
16	General Aptitude Test Battery (GATB)	X												Paper and pencil and apparatus
17	General Clerical Test (GCT)	X									X			Paper and pencil
18	Gordon Occupational Check List II (GOCL II)					X								Paper and pencil
19	Hall Occupational Orientation Inventory							X						Paper and pencil
20	Hand-Tool Dexterity Test	X									X			Apparatus
21	Industrial Reading Test (IRT)								X					Paper and pencil

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Table 1—Continued

No	Instrument	What is Measured?												How is the Instrument Administered?
		APT	ATT	CD	EXP	INT	OK	PER	SK-AC	SK-CD	SK-OCC	TEM	VAL	
22	Job Analysis and Interest Measurement (JAIM)					X				X			X	Paper and pencil
23	Knowledge of Occupations Test						X							Paper and pencil
24	Kuder Occupational Interest Survey Form DD (KOIS-DD)					X								Paper and pencil
25	Minnesota Importance Questionnaire (MIQ)							X						Paper and pencil
26	Missouri Occupational Card Sort (MOCS)					X								Card sort
27	Missouri Occupational Preference Inventory (MOPI)					X								Card sort
28	Myers-Briggs Type Indicator (MBTI)							X						Paper and pencil
29	Nonreading Aptitude Test Battery (NATB)	X												Paper and pencil and apparatus
30	Non-Sexist Vocational Card Sort (NSVCS)					X							X	Card sort
31	Occupational Interests Card Sort (OICS)					X								Card sort

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TABLE 1—Continued

No	Instrument	What is Measured?												How is the Instrument Administered?
		APT	ATT	CD	EXP	INT	OK	PER	SK-AC	SK-CD	SK-OCC	TEM	VAL	
32	Occ-U-Sort (O-U-S)					X							X	Card sort
33	Ohio Vocational Interest Survey (OVIS II)					X								Paper and pencil
34	Personal Career Development Profile (PCDP)							X						Paper and pencil and computer
35	Picture Interest Exploration Survey (PIES)					X								Paper and pencil
36	Program for Assessing Youth Employment Skills (PAYES)		X			X				X				Paper and pencil
37	Self-Description Inventory (SDI)							X						Paper and pencil
38	Self-Directed Search (SDS)					X					X			Paper and pencil
39	Strong-Campbell Interest Inventory (SCII)					X								Paper and pencil
40	Survey of Interpersonal Values (SIV)							X					X	Paper and pencil
41	Talent Assessment Program (TAP)	X									X			Apparatus
42	Temperament and Values Inventory (TVI)											X	X	Paper and pencil

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TABLE 1—Continued

No.	Instrument	What is Measured?											How is the Instrument Administered?	
		APT	ATT	CD	EXP	INT	OK	PER	SK-AC	SK-CD	SK-OCC	TEM		VAL
43	VALPAR Component Work Sample System (VCWS)	X				X					X			Work sample
44	Vocational Exploration and Insight Kit (VEIK)					X				X				Paper and pencil, card sort
45	Vocational Information and Evaluation Work Samples (VIEWS)	X				X					X			Work sample
46	Vocational Interest, Temperament, and Aptitude System (VITAS)	X				X						X		Work sample
47	Wide Range Interest-Opinion Test (WRIOT)					X							X	Paper and pencil
48	Word and Number Assessment Inventory (WNAI)	X												Paper and pencil
49	Work Values Inventory (WVI)												X	Paper and Pencil
50	World of Work Inventory (WOWI)	X				X						X		Paper and pencil

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Suggestions for Career Planning

As a teacher or counselor, you can help students develop career planning skills, particularly if you think of career planning as a

problem-solving process, consisting of a series of steps described below.

Facilitating Career Planning

Defining the Problem

Defining the problem means stating it clearly and concisely. For many students, the immediate problem is to identify reachable goals that will satisfy the students and that will be achieved. As students gather more information about what would be satisfying and achievable, they likely will be able to define their problems more precisely.

Identifying Key Factors

One way to help students identify the key planning factors is to pose questions that will start them thinking about what they know about themselves and the world of work. Questions directed to students should address self-awareness and work-related factors, for example:

Self-awareness factors

- What kind of job do you want when you finish school? How long do you want to stay in it?
- What do you see yourself doing in 5 years? 10 years?

- What do you like to do? What do you do well? What are your weak spots? What work experience do you have?
- What do you hope to get out of work? What is most important (for example, salary, responsibility, challenge, security, atmosphere, sense of accomplishment, helping others)?
- Are you willing and able to get more education or training to reach your goals?
- What special factors might affect your employment (e.g., handicaps, lack of money, communication problems)?

Work-related factors

- Where could you advance from an entry-level job? What would it entail?
- How does your projected entry-level job relate to long-range goals? What paths would get you there?
- What occupations could provide opportunities to use your skills? In what occupations would your weak areas not be a problem? How can you improve those weak areas?

- What careers seem to offer the most rewards for you?
- What additional education or training do you need?

Gathering Information

Career-related self-awareness requires an objective view of one's abilities, aptitudes, and other characteristics. Some students may not have thought about themselves in these terms. As indicated in the first part of this guidebook, there is much that you can do.

Values clarification materials, for example, can help students think about what is important to them. Although many commercial materials are available, you can create your own activities. For example, one useful activity is to use role-playing situations in which conflicting values are evident. These situations should require students to think about such work values as a desire for status, money, working conditions, security, challenge, and so forth. Some useful career awareness activities follow.

Listing career characteristics relating to different career levels. For example, list characteristics such as working alone, working with others, supervising others, and checking other people's work. Students could indicate preferences by rating the characteristics. Help students interpret the results by pointing out relationships between school and work activities.

Showing how course requirements are related to careers. Students' performance, to some extent, predicts success on a job. As students complete their courses, they begin to test themselves against the demands of the world of work. Their classroom successes and failures often affect their self-images. Suggested activities include the following:

- Clarifying course requirements and explaining their relationship to work. This helps students evaluate their career potential more accurately.
- Sequencing learning activities in order to build upon success. This helps students

develop a healthier self-image while improving their competencies.

- Making the class reflect the real world of work. This helps students examine career preferences and potential. (For example, in vocational programs, behaviors required on the job—punching a time clock and checking with the supervisor—should be required in class.) By comparing their values with real work requirements, students may see themselves more clearly in career terms.

Provide career and occupational information. As students learn more about their potential, they need to be able to relate this information to work. How are certain jobs related? How does one move from one to another? How much more training or experience is needed to advance? You can do much by providing or arranging printed materials from vocational organizations, career information kits, audiovisual materials, field trips, and career simulations and games.

Examining Possible Solutions

As students gather more and more information, they begin to develop tentative goals. Most do this gradually, not as a one-time activity. There are many things teachers and counselors can do. Here are two suggestions:

- *Expand horizons.* Because of negative self-images, some students set goals that are unrealistically low. They may reject a career because it sounds too hard or because they are afraid of risking failure. In addition, many also will reject nontraditional careers for their sex, race, and/or handicap. You can help by being supportive and by providing positive role models.
- *Provide information on employment rights and opportunities.* Many students are concerned with barriers to career progression. An economically disadvantaged student, for example, may assume that he or she cannot afford advanced training. They need to be aware of their rights and of sources of assistance that would help open

doors. Depending upon their needs, you should provide information on affirmative action and protections under title IX (legislation providing for access by the handicapped, financial assistance, and modifications to work situations that accommodate special needs).

Selecting Tentative Solutions

When students compile all they have learned about themselves and about various careers, they should have a fairly good idea about what they want to do, what certain occupations require, how they measure up, how far they can reasonably aspire, and—most importantly—how they can get there. They should be ready to set tentative goals and achievable alternatives. You can help in two ways:

- *Help students clarify both short- and long-range goals.* The path to the long-range goal usually is made up of many short-range goals. Show students different possibilities.
- *Encourage students to keep their options open.* Students need to realize that they are always changing, maturing, and reaching out. The persons they will be five years from now will be very different from who they are today. It is important to avoid narrowing options too early. It often is possible for a student to select a path that will let him or her change direction without wasting time or effort. Sometimes a student will

not be able to decide between two or more goals. It may be possible to set short-range goals that will move the student forward so that he or she can "focus" later on.

Evaluating Results

Testing out tentative solutions is especially important for students with low self-esteem. For example, you might have a student who has done a good job of self-assessment but who doubts whether his or her goals really are feasible. Testing them out can help add confidence to the student's plans. Real practice situations such as internships are valuable, as are volunteer or committee work that requires some of the same skills as those in the student's tentative occupational selection. A part-time job in a related field could provide meaningful experience by giving the student an opportunity to watch other workers and ask questions that could make a difference.

Taking Action Steps

The planning process should include steps students should take to help them achieve their goals (e.g., a part-time job, volunteer work, or tutorial help). Such in-depth planning takes much patience and lots of introspection. Students need time to digest, "try on," "try out," and live with their decisions—at least for a while. Help students see that career planning is a life-long process that requires continual reevaluation and adjustment.

Using Individualized Career Development Plans

The use of individualized career development plans, of which there are various models, is a proven method of guiding students toward a smooth transition from school to work. Such plans are a comprehensive record of students' behaviors, abilities, interests, skills, and competencies, as well as their educational and career goals. They are, in effect, based on several of the following simple—but basic—principles:

- Individual development occurs over the entire life span.

- Career development occurs over the long run; therefore, educational, labor, business, and industry representatives each play a continuing role in enhancing this development.
- Career guidance, once viewed merely as a process of matching people and jobs, is seen as a complex process involving the changing nature of both the work place and the individual.

Individualized career development plans normally have the following characteristics:

- Individualized career development plans are *comprehensive* in that they detail the student's past, present, and future experiences and goals. They provide a written way for students to identify and consider *who* they are, *where* they are going, and *how* to get there in terms of life roles as future workers, consumers and citizens, learners, individuals, and family members.
- Individualized career development plans are *developmental* so they can be used throughout one's life. Since individuals always are in a state of transition, the plans include elements that are responsive to the demands of different life roles and stages. They are not a form students fill out once and follow, but rather plans that are modified as new experiences are acquired.
- Individualized career development plans belong to the students using them. They are *person centered* and *person directed*, although many people—including business and industry personnel, teachers, and counselors—are involved in how they are developed.
- Individualized career development plans are competency-based. They include essential information about aptitudes, interests, and values. One's past and present experiences and achievements are also essential. To these elements are added the notion of competencies, skills, knowledge, and attitudes acquired as one works and lives in the home, school, workplace, and community. The plans reflect current competencies as well as additional ones students may need to respond to future roles.

The central elements of individualized career development plans typically include the following role elements:

- *Worker roles.* Students record information about the worker competencies they want to develop. A listing of interests and apti-

tudes are included plus tasks performed in the home or school.

- *Learner roles.* A complete record of educational experiences and achievements are recorded. Transcripts, lists of competencies, lists of informal learning experiences, and extracurricular activities are included.
- *Individual roles.* Students record information about their values, friendships, and leisure pursuits. Health records are recorded including medication taken, past illnesses, and the like.
- *Family member roles.* Here the student reports relevant information about family members, possible family crises, and what was done to handle them. Short anecdotes are included.

Such plans also include action steps that provide students with opportunities to analyze, synthesize, and apply the information. It is important to design the plan in a manner that will enable students to think in new ways about the information they record. Possible barriers to the completion of goals should be identified. Friendship and support groups should be noted and role models should be identified.

Although there is no one set structure for an individualized career development plan, these two points are suggested:

- *The life roles of consumers/citizens, learners, individuals, and family members often are used to provide the main structure.* Each plan would contain a section in which students think through their plans. This section would provide opportunities to analyze and synthesize information and generalize these findings to present and future actions.
- *Consider using a three-ring binder format for organizing the plans.* Also, with the increasing use of microcomputers, you might wish to develop a computerized plan or perhaps use a combination of formats—the computer to store information for easy retrieval, the notebook to monitor action steps.

Note For additional details on individualized career development plans, see Gysbers (1983)

The planning information seeking guide (see exhibit 2) could also be adapted in laying

the foundations for developing individualized career development plans with your students

EXHIBIT 2

GUIDE FOR DEVELOPING INDIVIDUALIZED CAREER PLANS

1. Have you made any *tentative decisions* about what career goals you wish to pursue?

☐ No

What obstacles are delaying your decisions?

☐ Yes

What are your goals?

1st

2nd

3rd

What obstacles do you feel may interfere with your achievement of these goals?

2. Please check each type of career information that you feel you need to investigate in more depth:

☐ Local employment trends

☐ National employment trends

☐ Amount of education and/or training needed

☐ Working conditions

☐ Fringe benefits

☐ Qualifications for specific jobs—age, aptitude, license, and so on

☐ Union dues, association fees

☐ Advancement possibilities

☐ Earnings

☐ Tools or equipment

☐ Other types.

3. If you plan to go directly to work after graduation, complete the following:

A. Check the statement that best describes your present plans for employment.

☐ I plan to look for full-time work.

☐ I have a full-time job lined up.

☐ I plan to look for part-time work.

☐ I have a part-time job lined up.

☐ I plan to look for a summer job.

☐ I have a summer job lined up.

☐ I have no definite plans at this time.

EXHIBIT 2—Continued

- B Check the statement that best describes the location where you are interested in being employed.

☐ Specific county in this State
(first and second choices)

☐ Specific city in this State
(first and second choices)

☐ Anywhere in this State

☐ Out-of-state

☐ Other locations

- C. List three specific types of jobs in which you are interested

4. Check the statement that best describes your present plans for education or training after you graduate.

A. I plan to enroll directly in further education/training.

☐ Yes ☐ No

If no, move to Item H below.

If yes, continue with Items B to G.

B. I plan to continue my education/training.

☐ full-time ☐ part-time

C. I have definite plans at this time concerning the type of educational institution or training program I wish to attend.

☐ Yes ☐ No

If no, move to Item G below

If yes, continue with Item D.

- D. I plan to attend the following type of institution or training program:

☐ Four-year college or university

☐ Trade or technical school

☐ Community or junior college

☐ Apprenticeship program

☐ Continuing or adult education program

☐ Other _____

E. I know which specific educational institution(s) I would like to attend.

☐ Yes ☐ No

If no, move to Item G below.

If yes, continue on to Item F.

EXHIBIT 2—Continued

F. The names of the institutions I would like to attend are as follows:

1st choice _____
2nd choice _____
3rd choice _____

G. I plan to finance my education/training in the following way(s):

- | | |
|---------------------------------------|---|
| <input type="checkbox"/> Grants | <input type="checkbox"/> Full-time work |
| <input type="checkbox"/> Loans | <input type="checkbox"/> Part-time work |
| <input type="checkbox"/> Scholarships | |

H. If you do *not* plan to enroll directly in additional education or training, check the items that best indicate why you do not plan to continue your education or training at this time.

- ☐ I plan to enlist in the Armed Services.
- ☐ I want to start work immediately after I graduate.
- ☐ I cannot afford further education or training at this time.
- ☐ I have no desire for additional education or training at this time.
- ☐ I expect to seek additional education or training in the future.
- ☐ Other reasons: _____

SOURCE: Adapted from Harrington (1984).

Employability Development Plans

The term employability development plan or EDP is commonly used in employment and training programs and in many ways are like "individualized career development plans" in that they—

- provide a written record of decisions made and courses of action to follow,
- provide the individual with a sense of progress, and
- force the individual to assume responsibility for his or her own behavior

The sample plan in exhibit 3 includes sections on educational history, work history, interests and job goals, information on tests, and identified barriers to job goals. EDP users also have a place to record recommendations regarding short-term and long-term goals, a contractual agreement with the client, and a statement of certification. The last part includes a section to record monitoring activities, an EDP update, and postplacement activities. You may wish to adapt this EDP for school use or at least share it with your students so that they are familiar with one.

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EXHIBIT 3

EMPLOYABILITY DEVELOPMENT PLAN (Employment and Training Programs)

Name of Client	Address	Telephone
	Location of Interview	Soc. Sec. No
		Date

EDUCATIONAL HISTORY

1 Highest grade completed <input type="checkbox"/> Less than 8th <input type="checkbox"/> Over 8, less 12 <input type="checkbox"/> High school graduate <input type="checkbox"/> Less than 2 years college <input type="checkbox"/> 2-4 years college <input type="checkbox"/> College graduate <input type="checkbox"/> Post-graduate <input type="checkbox"/> Voc-tech school <input type="checkbox"/> G E.D.* <input type="checkbox"/> Other (specify) _____ *Source of G E D _____ _____ _____	2 Major subjects studied in highest level of school 3 Check your educational needs. <input type="checkbox"/> Remedial education in reading or math <input type="checkbox"/> Basic education <input type="checkbox"/> English as a second language <input type="checkbox"/> Other (specify) _____	4 Favorite subject(s) 5 Least favorite subject(s)	6 Subject(s) in which you did best 7 Subject(s) in which you did least well	8 High school(s) attended Attended from _____ to _____ Diploma <input type="checkbox"/> Yes <input type="checkbox"/> No 9 College(s) attended Attended from _____ to _____ Degree(s) _____ 10 Voc/Tech schools attended Attended from _____ to _____ Graduated <input type="checkbox"/> Yes <input type="checkbox"/> No Course studied _____
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WORK HISTORY—List most recent employment first

Employer Name and Address	From	Employed To	Job Held (special skills required)
11. _____	_____	_____	_____
12. _____	_____	_____	_____
13. _____	_____	_____	_____
14. _____	_____	_____	_____
15. _____	_____	_____	_____

SOURCE: Adapted from *Employability Development Plans: Counseling Participants and Developing EDPs*. National Center for Research in Vocational Education, 1981.

EXHIBIT 3—Continued

16. Are you unemployed now? <input type="checkbox"/> Yes <input type="checkbox"/> No	18. If unemployed, check reason: <input type="checkbox"/> Fired <input type="checkbox"/> Resigned <input type="checkbox"/> Laid off <input type="checkbox"/> Never worked <input type="checkbox"/> Maternity leave <input type="checkbox"/> Enrolled in school <input type="checkbox"/> Re-entry into labor market after absence of _____ years <input type="checkbox"/> Other (explain)	19. What is the longest time you stayed in any one job? <input type="checkbox"/> Less than 6 months <input type="checkbox"/> 6 months to 1 year <input type="checkbox"/> 1 year to 3 years <input type="checkbox"/> 3 years to 5 years <input type="checkbox"/> Over 5 years
17. What is the most money you ever made on a job? \$ _____ per hour		
20. Which of your past jobs did you like most? Why?	21. Which of your past jobs did you like least? Why?	22. What job skills do you have?
23. Driver's license? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, state/number:	24. Union member <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, name of union:	25. Other license or certificate:

INTERESTS AND JOB GOALS

26. Describe your hobbies. What do you do for enjoyment?	27. What are your main interests?	28. What type of job would you like if you could choose any one you wanted?	29. How much money would you like to earn?
30. How much money do you need at the present time?	31. What kind of training would you like to get?	32. What kind of job would satisfy you now, even if it is just entry level?	33. What kind of job would you be willing to accept for the rest of your life?

EXHIBIT 3—Continued

ADMINISTRATION OF TESTS

34. Tests administered. <input type="checkbox"/> None <input type="checkbox"/> Interest (list) <input type="checkbox"/> Aptitude (list) <input type="checkbox"/> Basic Skills (list) <input type="checkbox"/> Other (specify)	35 Tests recommended <input type="checkbox"/> None <input type="checkbox"/> Interest (list) <input type="checkbox"/> Aptitude (list) <input type="checkbox"/> Basic Skills (list) <input type="checkbox"/> Other (specify)	36 Summary of test results and their implications <p>(Note: More space undoubtedly will be needed for this item.)</p>
---	--	---

BARRIERS TO JOB GOALS

37. <input type="checkbox"/> Age - too young <input type="checkbox"/> Age - too old <input type="checkbox"/> Transportation <input type="checkbox"/> Unfamiliar with area <input type="checkbox"/> Child care needs	<input type="checkbox"/> Personal problems <input type="checkbox"/> Health problems <input type="checkbox"/> Physical handicap <input type="checkbox"/> Arrests/convictions <input type="checkbox"/> Alcohol addiction	<input type="checkbox"/> Drug addiction <input type="checkbox"/> Lack of education <input type="checkbox"/> Lack of marketable skills <input type="checkbox"/> Lack of experience <input type="checkbox"/> Skills obsolete	<input type="checkbox"/> None <input type="checkbox"/> Others (specify)
--	--	--	--

CASE REVIEW AND RECOMMENDATIONS

38. Current labor market situation 	39 Short-range goals recommended 	40 Long-term goal recommendations
41 Requirements to meet short-term goals 	42 Requirements to meet long-term goals 	43 Supportive service requirements
44. Recommendations made by: <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div> <input type="checkbox"/> Counselor alone <input type="checkbox"/> Staff conference </div> <div> <input type="checkbox"/> Outside consultant(s) <input type="checkbox"/> Outside (specify) </div> </div> <p style="text-align: center; margin-top: 10px;">date</p>		

EXHIBIT 3—Continued

AGREEMENT FOR SERVICES

45. Job Objective

46. Training or education needed to reach objective.	47. Team members responsible for monitoring	48. Estimated time for completion Month/Day/Year	49. Expected outcomes

50. Supportive services

- 51. Outside resources for assistance**
- ☐ Part-time job ☐ Other (specify)
- ☐ Night school

CERTIFICATION AND AGREEMENT

I certify that all the information given is true to my best knowledge and belief. I further certify that all the above data, as well as my personnel rights and privileges, have been discussed with me and that I have participated in and fully agree to the decisions and terms outlined herein.

Client's Signature

Date

Counselor's Signature

Date

EXHIBIT 3—Continued

MONITORING ACTIVITIES

52. Contacts or on-site visits.	Location	Date	Summarize results
53. Counseling conducted		Date	Summarize results

EDP UPDATE

54. Assessment conference conducted <input type="checkbox"/> Yes <input type="checkbox"/> No	Date	Attended by
55. Assessment conference results Does client meet— Objective qualifications? <input type="checkbox"/> Yes <input type="checkbox"/> No Training objective qualifications? <input type="checkbox"/> Yes <input type="checkbox"/> No	56. Modifications to short-range goals	57. Modifications to long-range goals
58. Modifications to job objective	59. Suggested next steps (explain) <input type="checkbox"/> Training <input type="checkbox"/> Placement <input type="checkbox"/> Other	60. Action taken <div style="text-align: right;">Date:</div>

EXHIBIT 3—Continued

POST-PLACEMENT ACTIVITIES

61. Employment (Company, Address, Phone)

Date placed

62. Staff member responsible

63. Type of assistance provided.

Date

Results

64. Termination of services

Date

Comments

Using Computerized Career Guidance Systems

The computer systems available in career guidance programs can be divided into three general types: batch-processed vocational information systems, on-line vocational information systems, and on-line career guidance systems. Those who are interested in probing more deeply into this topic would benefit from reading *Conduct Computerized Guidance* (Whitfield 1985). The three types of computerized career guidance systems are described in the module in detail, as are the following specific approaches:

- *Career Information System (CIS)*. For more information, write to Dr. Bruce McKinlay, 247 Hendricks Hall, University of Oregon, Eugene, Oregon 97403.
- *Computerized Vocational Information System (CVIS)*. For more information, write to CVIS Distribution Center, Western Maryland College, Westminster, Maryland 21157.
- *DISCOVER: A Computer-based Career Guidance and Counselor—Administrative Support System*. For more information, write to DISCOVER Foundation Inc., Box 363, Westminster, Maryland 21157.
- *Education and Career Exploration System (ECES)*. For more information, write to Genesee Intermediate School District, 2413 West Maple Avenue, Flint, Michigan 48507.
- *Guidance Information Systems (GIS)*. For further information, write to Time Share Corporation, Three Lebanon Street, Hanover, New Hampshire 03755.
- *Programmed Assistance in Career Exploration (PACE)*. For further information, write to McDonald's PACE Program, McDonald's System Inc., One McDonald's Plaza, Oak Brook, Illinois 60531.
- *System for Interactive Guidance and Information (SIGI)*. For more information, write to Dr. Martin Katz, Educational Testing Service, Box 592, Princeton, New Jersey 08540.

When considering ways to implement a system, determine what functions of your program can and should be computerized. According to Whitfield (1985), two necessary levels of decision making are questions relating to (1) the need for computerized assistance and of the functions it will perform and (2) the implementation of a specific system once it is decided the program can benefit from computerized career guidance assistance.

Whitfield poses 22 questions about system use. Some of the most crucial ones follow:

- What are the measurable objectives of your program?
- What problems must be solved to meet your program needs?
- Is a computer-based system the most effective way to meet your objectives?
- Can you place terminals where they will be convenient for the guidance personnel and where the terminal's noise level will not disturb others?
- How easily may students be oriented to the use of the terminal? Does someone always need assistance?

Compare computer systems also. Know in which of the following goals the computer system is expected to assist the program:

- Providing current labor market information
- Providing occupational information
- Providing educational information
- Providing training information
- Integrating career information into the total program
- Improving occupational training and career choices

- Relating personal characteristics to career alternatives
- Developing and enhancing decision-making abilities
- Facilitating information retrieval by staff to assist clients
- Using the computer as an interactive part of the program's counseling service
- Providing administrative assistance
- Providing curriculum and instructional assistance
- Providing values identification
- Assisting in the testing program

Once it is known what is expected of a computer system, specify which system best meets the program's objectives. Some of the important questions to ask are as follows:

- How many occupations should be included in the system?
- How lengthy should occupational/educational descriptions be?
- How should occupations be grouped to best serve the program?
- What information is wanted—national, state, regional, local?
- What occupational information should be included (e.g., nature of the occupation, working conditions, worker traits, advance-

ment opportunities, entry methods, related occupations, advantages and disadvantages, earnings, current employment data, employment outlook)?

- What education and training data should be included (e.g., information like types of educational training, enrollment procedures, rules, degrees, placement, housing, admission requirements, costs, programs, handicapped arrangements, apprenticeships)?
- Will there exist a scholarship and financial aids file that contains information like types and availability of aid, application procedures, and eligibility requirements?
- Will there exist an employers' file that contains information such as company profiles, training programs, hiring policies, advancement opportunities, and field trips/visits?
- Will there exist data for special populations (women's resources, child care centers, legal services, minority resources, handicapped resources)?
- Will there exist a job-seeking skills file that contains interviewing, applications, job search strategies, and resume preparation information? (Whitfield 1985, p. 13)

Obviously, advantages and disadvantages exist for each system. It is likely that none of the available systems will fulfill all of the requirements. Consider carefully which system to adopt based on existing resources and priorities.

Using Community Resources in Career Planning

In addition to school resources, numerous community resources offer valuable transitional services. Here are some examples.

Government-Supported Employment and Training Services

The Job Training Partnership Act (JTPA) provides for comprehensive employment and training services for economically disadvantaged youth (and adults). Such services may include the following:

- Job search assistance, including counseling and referral
- On-the-job training, upgrading, and retraining
- Supportive services, including health care, residential support, and transportation

You may, for example, have a student who cannot afford to continue his or her training because of economic difficulties. This student may be eligible to receive JTPA support that covers training expenses. Make certain that students are aware of the availability of such funding and refer them to the appropriate agency.

Vocational Rehabilitation

"Voc rehab" services are provided for eligible handicapped persons. To be eligible, three criteria normally must be met:

- The individual must be diagnosed as having a physical, mental, or emotional impairment.
- The diagnosed impairment must present a handicap to the person's ability to find suitable employment.

- There must be a reasonable expectation that the individual will be able to find suitable employment after receiving rehabilitation services. Services typically include—

- diagnosing and evaluating rehabilitation potential;
- counseling and guidance, including personal-adjustment counseling throughout a handicapped person's program, and referrals to secure services from other agencies;
- training services of a personal- and vocational-adjustment nature, including the provision of work experience, books, tools, and other materials related to training;
- providing transportation;
- providing placement in suitable employment; and
- providing other goods and services that can reasonably be expected to increase the employability of a handicapped individual.

Other Government and Community Agencies

Numerous other organizations provide a wide variety of services. For example, a city's housing authority can help disadvantaged students and their families find low-rent housing. Halfway houses assist with drug problems. Local hot lines usually provide information on almost all community service agencies.

REFERENCES

- American Educational Research Association, American Psychological Association, and the National Council on Measurement in Education. *Standards for Educational and Psychological Testing*. Washington, DC: American Psychological Association, Inc., 1985.
- Determine Needs and Interests of Students*. Professional Teacher Education Module Series, Module B-1. The National Center for Research in Vocational Education. Athens, GA: American Association for Vocational Instructional Materials, 1977.
- Employability Development Plans: Counseling Participants and Developing EDPs*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1981.
- Gysbers, Norman C. *Create and Use an Individual Career Development Plan*. Competency-Based Career Guidance Modules, Module, CG-C-12. Wooster, OH: Bell & Howell Publication Systems Division, 1983.
- Harrington, Lois G. *Establish a Student Placement Service and Coordinate Follow-up Studies*. Competency-Based Vocational Administrator Module Series, Module LT-C-4. The National Center for Research in Vocational Education. Athens, GA: American Association for Vocational Instructional Materials, Revised edition, 1984.
- Kapes, Jerome T. and Mastie, Marjorie M., editors. *A Counselor's Guide to Vocational Guidance Instruments*. Alexandria, VA: The National Career Development Association, 1982.
- Keyser, D. J., and Sweetland, R. C. (editors). *Test Critiques*. Five volumes. Kansas City, MO: Test Corporation of America, 1985 and 1986.
- Mitchell, James V., Jr., editor. *Ninth Mental Measurements Yearbook*. Two volumes. Lincoln: University of Nebraska Press and the Buros Institute of Mental Measurement, 1985.
- Mitchell, James V., Jr., editor. *Tests in Print III*. Two volumes. Lincoln: University of Nebraska Press and the Buros Institute of Mental Measurement, 1983.
- Vetter, Louise; Hull, William L.; Putzstuck, Christine; and Dean, Gary J. *Adult Career Counseling: Resources for Program Planning and Development*. Bloomington, IL: Meridian Education Corporation, 1986.
- Whitfield, Edwin A. *Conduct Computerized Guidance*. Competency-Based Career Guidance Module Series, Module CG-C-3. The National Center for Research in Vocational Education. Wooster, OH: Bell & Howell Publication Systems Division, 1985.

INVOLVING THE COMMUNITY IN TRANSITIONS

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Introduction

Involving the Community in Transitions is a planning resource designed to assist administrators, teachers, and other school staff who coordinate, or who may be called upon to coordinate, school-community involvement efforts. It presents an overview of school-community involvement—what it is and why and how it is accomplished.

Although this document represents a synthesis of numerous publications on the topic, it focuses only on selected aspects of school-community involvement. The intent is to provide a means by which users can further design school-community involvement programs that meet the school transition needs of their students.

Why Is It Important to Involve the Community in Transitions?

Helping students with their transitional needs is the responsibility of the entire staff—administrators, teachers, and counselors. It involves the following activities:

- Assessing needs
- Providing career information
- Making appropriate referrals
- Guiding career awareness and exploration activities
- Providing job orientation services
- Conducting follow-up studies
- Providing follow-through services

These activities, however, cannot be pursued by school personnel alone. They must involve the entire community—those who live with, work alongside, and employ the young people the schools have served.

According to *Reconnecting Youth: The Next Stage of Reform* (1985), over 20 percent of

our nation's high school students drop out of school before they graduate. Of those who do graduate, about 30 percent make high school graduation the end of their formal education and the starting point for work. The nature of these young people who comprise our entry-level labor pool suggests the need for community concern.

The entry-level labor pool, then, contains more and more of the kinds of teenagers employers have been able to overlook in the past: poorly motivated, lacking fundamental literacy skills and unacquainted with the responsibilities and demands of the work world. These young people are at risk of never living up to their potential, never leading productive adult lives They have the intelligence to succeed, but they lack important skills, family support, discipline, and the motivation to make it. (*Reconnecting Youth*, 1985, pp. 7 and 8.)

Business and industry cannot afford to ignore these youth. They need competent, skilled, and productive workers in order to com-

pete in world markets. Business and industry already spend \$40 billion annually to train employees and can expect these costs to increase as more youth enter the work force lacking necessary skills. The societal costs of inadequately prepared high school graduates and disconnected youth also are high, and they relate to such problems as poverty, alcohol and drug abuse, pregnancy, single parenting, crime, and unemployment.

Thus, helping students make successful school and work transitions is everyone's concern. Supportive community involvement is an essential ingredient for any school program designed to prevent students from dropping out and to prepare them with the academic, employability, and job-specific skills that will enable them to succeed in the workplace. By combining efforts, the school and community can realize goals that are mutually and separately beneficial. For example:

- *Schools* benefit by having the traditional classroom environment take on new life, supplemented by the expertise of community members.
- The *community* benefits when its leaders become involved in educational activities, helping to broaden the focus of educational programs so they respond to the employment needs of the community.
- The *school and community* benefit when students are motivated to work—in school and on the job—to become productive members of society.

School-community involvement, however, does not occur automatically. Community people need to be recruited and convinced that they have something to contribute. Although the following is not an exhaustive list, these potential outcomes often motivate groups to respond positively when asked to be involved in school-community programs:

Community service agencies

- Help youth understand the value of education and training
- Provide better career counseling and information
- Help youth in preemployment training, especially delinquency-prone or court-referred youth or teenage parents

Business and industry

- Increase productivity by improving occupational skills training
- Assure a flow of qualified workers
- Reduce taxes by reducing local unemployment
- Improve employability skills and work habits, especially of young workers

Labor organizations

- Combat unemployment and open up more jobs to potential members
- Improve the quality and quantity of apprenticeship programs
- Create access to jobs and healthy working conditions

Local job training and economic development agencies

- Improve on-the-job training placements
- Increase the efficiency of on-the-job training through coordinating resources

What Are the Main Types of School-Community Involvement?

In summarizing the degrees of school-community involvement that are described in the literature, it appears that they can be viewed on a scale of zero to four: separation (0), communication (1), cooperation (2), collaboration (3), and integration (4). These dimensions, used to describe each level, are presented in exhibit 1 which provides a quick way to assess the nature of any school-community involvement effort.

Some other terms commonly found in the research in this area are linkages, coordination, and networking. *Linkages* often is used to describe negotiated arrangements between organizations, the purposes of which are to meet mutually defined objectives. *Coordination* often is used to describe arrangements between organizations to identify common goals and to provide services to achieve the goals.

EXHIBIT 1

RANGE OF SCHOOL-COMMUNITY INVOLVEMENT

Separation	Communication	Cooperation	Collaboration	Integration
"0"	"1"	"2"	"3"	"4"
<ul style="list-style-type: none"> • No information or resources are shared • Institutions "go it alone." There is total independence. 	<ul style="list-style-type: none"> • School seeks information and advice • School and community maintain separate spheres of authority. <p>Examples:</p> <ul style="list-style-type: none"> —advisory committees —use of resource persons —visits to businesses and industries 	<ul style="list-style-type: none"> • Two spheres of authority exist. • Community becomes involved in various school activities and provides some resources. <p>Examples:</p> <ul style="list-style-type: none"> —donation of equipment —job placement arrangements —staff exchanges 	<ul style="list-style-type: none"> • Two spheres of authority exist. • Organizational structures and processes are not modified in either organization. <p>Examples:</p> <ul style="list-style-type: none"> —joint planning and programming —industry-education councils —adopt-a-school program 	<ul style="list-style-type: none"> • Organizational structures are modified to accommodate objectives. • Resources merged to accomplish mutual objectives; responsibilities for accomplishing objectives are shared. <p>Example:</p> <ul style="list-style-type: none"> —industry-sponsored high schools (in engineering and computer science)

The term *Networking* appears to be gaining in use. It often is used to describe an arrangement that is more clearly defined in terms of its features; that is, it involves many individuals and groups, participation is voluntary, members share a sense of commitment to program improvement, and some individual usually functions as a facilitator. Networking often is defined as organizational cooperation. However, because organizations' missions differ, cooperation must be based on certain guiding principles, namely, groups that depend on each other for resources—including human resources—are recognized as mutually supportive. Shared goals tend to foster cooperation; successful articulation occurs when plans are exchanged as they are developed; potential for cooperation increases as the frequency and quality of communication increases; and, as cooperation increases, transactions become formalized.

The frequency of involvement desired by the school and community can range from "ad

hoc" to "periodic" to "continual" with many stops in between. For example, "ad hoc" consists mainly of involvement—usually to meet a specific need—without a formal, ongoing structure. Use of a guest resource person is an example of "ad hoc" involvement. "Periodic" involvement usually includes frequent consulting with selected individuals or agencies in order to support a specific program. "Continual" involvement consists of a more formal arrangement between the parties.

Communication. Cooperation. Collaboration. Integration. Linkages. Coordination. Networking. Ad hoc. Periodic. Continual. All of these are ways to address the same issue—school community involvement. No one approach is best, which is why this guide uses the generic term *involvement*. The challenge is to consider all of the approaches with regard to these important questions: What am I doing in this area? Should I do more?

What Are Some Examples of Involvement?

Although many possibilities for involvement exist, the activities the school and community jointly select to develop will depend on mutually agreed upon objectives. The following are several examples of objectives:

- *Provide direct assistance to students* (e.g., provide information on training needs for entry-level jobs, provide feedback on the performance of former students, offer financial assistance and expertise for special courses, share equipment and training aids—or even instructors for specialized training, or organize student trips to plants and offices).
- *Update staff skills* (e.g., offer workshops and seminars for teachers, provide opportunities for teachers to obtain summer work experiences, and initiate recognition programs).
- *Assist school management and administration* (e.g., loan executives to work on special problems such as planning and procurement, or campaigns for bond issues

and special tax levies and conduct surveys of local industry training needs).

- *Increase public awareness of school programs* (e.g., establish advisory councils and information exchanges).

The resources that are available are as varied as the individuals and groups in the community. School-community involvement, therefore, is limited only by the knowledge of what is available, the willingness to take the initiative and the limits of the imaginations of those involved.

A variety of resource and program options are listed below. Although these examples are not all-inclusive, they should be sufficient to assist those involved in determining the focus of local school-community involvement efforts.

Resources. The following five resources should be considered:

- *Advisory committees.* Advisory committees are groups of community representatives

that advise school personnel on curriculum and instructional matters. The community representatives typically include employers or employees working in fields related to the area of instruction. Such committees serve a very wide variety of functions, including public relations, curriculum advice, funding support, and program evaluation.

- *Personnel exchanges.* Personnel exchanges are a way of expanding the awareness of business and industry by schools and of schools by people in business and industry. The approach typically involves short-term exchanges in which participants have their duties outlined and agreed upon before the actual switch. The personnel involved have related skill backgrounds so that they can each successfully perform the other's job.
- *Business-industry partnerships.* Business-industry partnerships involve pairing with a business or industry. The match usually is made annually and partners design their own agreement. The partnership may consist of a single special project or several joint activities, depending on the wishes of both partners.
- *Community compacts.* A community compact is a broad agreement between a school system and a business-industry community. This agreement is written with specific objectives and goals for each partner. (The "Boston Compact" has the following objectives: a 5 percent increase annually in the number of students who graduate as compared with the number who entered ninth grade and a 5 percent increase annually in the number of graduates placed in jobs or in further education. Also, by 1986, all graduates were to have demonstrated the reading and math skills necessary for employment through the achievement of minimum competency standards established by the school committee.)
- *Cooperative education.* Cooperative education normally involves secondary, or post-secondary, schools and employers in a joint educational effort. Traditionally, these program components contribute to

the students' occupational competence: general courses, a part-time job in their chosen occupational field, and related instruction.

Programs for students. The following four programs are useful:

- *Apprenticeship training.* Apprenticeship training covers a prescribed period of time, usually 3 or 4 years, during which an apprentice learns a trade or craft through a combination of on-the-job training and related classroom instruction. Traditionally, programs are operated by either an employer, a group of employers, or a joint apprenticeship committee representing both employers and unions.
- *Customized training.* Customized training is skill training developed by a school— or college—to meet the needs of a single employer. The training may or may not be offered for credit and may be offered at flexible times rather than on a quarter or semester calendar. Many varieties of this type of school-community involvement can be found.
- *Job shadowing.* Job shadowing is a method of providing students with short-term exposure to the world of work. Students typically follow an employee around on the job for a short period of time—usually a few hours to a few days—to observe what the employee actually does.
- *Training for the unemployed.* Skill training for the unemployed can be accomplished in a variety of ways. One way to approach this problem successfully is for schools to develop close relationships with community agencies that serve these clients and with employers who could hire them.

Programs for staff. The following three inservice programs are valuable:

- *Staff development.* Comprehensive staff development is an approach used to meet a variety of needs of teachers, counselors, and other staff. The approach typically is based on detailed needs assessments and

often includes such activities as workshops conducted during the school year, hands-on experiences, and follow-up activities that include participation in industry workshops.

- *Summer employment for business/industry/labor awareness.* Securing temporary summer employment can provide teachers with a better understanding of business, industry, and labor. The teachers work full- or part-time to learn about the operations of businesses, industries, and unions.
- *Technical skill updating.* Since teachers in technical fields need to prepare students to enter the working world, the skills they teach must be the same up-to-date skills required on the job. Updating is a way for teachers to renew their technological skills.

Two additional examples of school-community involvement are collaborative councils and career education programs.

Collaborative Councils

Although collaborative councils often are described by a variety of names—for example, Industry-Education-Labor Councils, Education-Work Councils, School-Community Action Councils—three approaches can be identified. Some councils emphasize the *service provider* approach, developing a specific service that other community organizations participate in and support; some emphasize the *facilitator/broker* approach, assisting community organizations in identifying and resolving common problems; and a third approach is the *special projects council*, designing and operating one-time fact-finding and analysis projects.

The general characteristics of such collaborative councils are fourfold: (1) Membership is representative of major sectors in a community; collaborative mechanisms are intended to join and serve the interest of more than two sectors. (2) Councils are essentially self-organized. Initial sponsorship may come from one sector or even a single organization, but once organized, the council is responsible for its own continuity. (3) Councils are performance-

oriented. Members and staff develop their own agenda and approaches to community needs. Although such councils may choose to play advisory roles in specific instances, they are designed to perform a variety of roles including fact-finding, program development, and program brokering. (4) Council members and the institutions they represent share responsibility for implementing the agenda that brings them together in the first place. Members exercise active leadership within their primary constituencies and with other sectors and constituencies. Collaboration implies a recognition of shared interests that leads to mutual action.

Career Education

Although career education has been defined in many ways over the past two decades, undoubtedly the most thorough conceptualization was presented by Hoyt (1978). In effect, Hoyt defined career education as a community effort aimed at helping youth acquire career adaptability skills through numerous activities (such as infusion in school subjects, work experience, and volunteer work). The process ideally utilizes the resources of the school, community, family, and government. According to Hoyt, the total effort is coordinated (but not managed) through a community career education council.

Career education can be delivered through such groups as schools, community-based organizations, youth groups, and the like. The types of community activities that fall under the heading of career education listed below has been greatly abbreviated and adapted from Hoyt (1981). Exhibit 2 also provides an action plan for improving career guidance.

- *Providing career education to youth in school*
 - Serving as role models for students interested in knowing more about a particular career
 - Providing opportunities in work settings for students to observe various occupations

EXHIBIT 2

IMPROVING CAREER GUIDANCE

The following is an example of a format that focuses on improving career guidance programs:

Need: To involve the community in career guidance program activities

Goal: To promote a systematic approach to school-community involvement

Objectives: To develop a procedure whereby community members will be involved in career guidance program activities

Implementation activities	Persons responsible	Resources needed	Cost factors
1. Survey community members to identify those interested in participating	Subcommittee	Survey forms	Minimal duplication
2. Organize information received from survey	Subcommittee	None	None
3. Develop a system for career guidance personnel to involve community members in student-centered activities, for example, group discussions, career fairs, demonstrations, field trips, any shadowing experiences.	Career guidance program team and other	Depends on activities selected	Depends on activities selected

Evaluation: Review student's progress to determine the effects of community involvement.

SOURCE: Adapted from Gysbers (1985)

- Providing opportunities for students to obtain unpaid or paid work experiences
- Helping students acquire information for overcoming work-related stereotyping
- *Providing career education resources*
 - Providing equipment that can be used by teachers for infusing career education into the classroom
 - Providing a career information library of reference materials
- *Providing inservice education*
 - Participating in inservice education aimed at helping teachers understand more about occupations, the role of organized labor, work-related stereotyping, and the career decision-making process
 - Helping teachers overcome work-related biases of race, sex, handicaps, and age
- *Gaining public support for career education*
 - Gaining community support through direct appearances as career education advocates
- Gaining school board and administration support
- *Increasing parental involvement*
 - Publishing materials for parents containing suggestions of ways they can provide career education for their children
 - Opening up business and industry settings on weekends for field trips for families who want to learn more about specific occupations
- *Providing advisory roles*
 - Helping to establish community career education councils
 - Serving as consultants in devising criteria for evaluating career education
- *Providing recognition and encouragement to schools*
 - Establishing reward and recognition systems for teachers and students who participate in career education activities
 - Devising and operating reward and recognition systems for community groups that are making efforts to implement career education

Who Are the Potential Community Resources?

Where does your "community" begin and where does it end? If you think of the concept of community as a cluster of people and organizations working together within a geographic region, you probably have a sufficient wide-angle view. This region may be a central community—or several communities—wherein lies a concentration of economic activity. The community, then, is composed of many sub-populations that are not mutually exclusive. Create a "community yellow pages" beginning with the following:

- *Business and industry*
 - Large manufacturing corporations and service and utility companies
 - Business and trade associations
 - Chambers of commerce
 - Business-sponsored civic groups
 - Private Industry Councils (PICs in the JTPA system)
- *Community-based organizations*
 - National ethnic advancement organizations
 - National client-oriented organizations

- Local multipurpose community action agencies, cooperatives, and economic development agencies
- Local private community organizations
- *Civic and quasi-political organizations*
 - Urban Coalition
 - League of Women Voters
 - Kiwanis, Lions, lodges, fraternal organizations, and other service clubs
- *Civil rights groups*
 - National Association for the Advancement of Colored People, local affiliates
 - National Urban League, local affiliates
 - Local civil rights commissions
 - Human relations boards
 - Opportunities Industrialization Centers
 - American Civil Liberties Union
- *Government agencies*
 - City, township, or village government agencies
 - County departments of planning and social services
 - State (e.g., Agricultural Extension Service, Bureau of Employment Services, and so forth)
- *Labor organizations*
 - American Federation of Labor/Congress of Industrial Organizations (state and local affiliates as well as central labor bodies)
- *Professional groups*
 - American Vocational Association
 - American Medical Association
- *Religious organizations*
 - Local clergy associations
 - Individual congregations
 - Regional denominational offices
 - National and regional groups
- *Service clubs (and other special-interest groups)*
 - Business and professional clubs
 - Fraternal organizations
 - Special-interest groups
 - Alumni groups
- *United Way or United Fund sponsored organizations (including youth organizations)*
 - Health agencies
 - Social service agencies
 - YMCA, YWCA
 - Boy Scouts, Girl Scouts, Explorers
 - Campfire Girls
 - Boys Clubs of America, Girls Clubs of America
 - 4-H Clubs

Identifying Resources

Because one's knowledge of a community does not necessarily depend on the number of years one lives there, getting to know the community needs to be a relatively formal process. Here are two "starter" questions: (1) What is in place now? and (2) Who in the community must first be sold on the idea of school-community involvement? Here are some points to consider when identifying resources.

Decide whether to use a "top down" or "bottom up" approach. Top-level endorsements from an organization or company may open many doors but—at least at the outset—may not be absolutely essential.

Use a combination of approaches when collecting information, for example, personal in-depth interviews supplemented with telephone interviews and/or a mail questionnaire to reach a large number of people in a short time. Your choice obviously depends largely on the number and type of people you want to survey, the desired depth of responses, and the amount of time that could be devoted to this effort.

Compile a comprehensive resource directory. It is highly improbable that any one person will know all of the individuals or groups that could provide service to a school. A resource directory typically includes the individual's area of expertise and previous experience in school-community involvement, if any. The file also identifies services already offered by community organizations.

- *Determine the geographic area to be included.* Although the logical boundaries are those of the school district, occasionally (especially when a small or rural area is involved) the boundaries must extend beyond the district's area.
- *Identify the names, addresses, and telephone numbers of persons to be contacted.* If a chamber of commerce directory and other community directories are available, use them as a starting point in preparing an expanded list.

- *Determine how and by whom the needed information will be gathered.* Whether you use personal or telephone interviews, mail surveys, or a combination of approaches, the determining factors usually are the amount of time and resources that you have available. It is often a good idea to secure the endorsement of the chamber of commerce, parent-teacher associations, and service organizations prior to conducting the survey.
- *Prepare appropriate survey instruments.* There are several sample forms provided in the appendix that you may wish to modify to meet your specific situation.
- *Collect, code, and classify the information.* The information typically can be classified in a number of ways or by a number of categories, for example, resource persons, work experience opportunities, and so forth. These can be further subdivided into occupational clusters, industrial clusters, or curriculum areas. The resources also can be divided into such categories as persons, businesses, nongovernmental agencies, and governmental agencies.
- *Update the directory periodically.* New listings should be added as they become available—or some might be deleted.

The appendix sample inventory is adapted from *Involve the Community in Vocational Education*, 1983 and should be modified further to meet your local needs.

Planning for School-Community Involvement

Overcoming Obstacles

Once community groups agree to become involved with the school, participation must be nurtured. Any number of the obstacles listed below could hamper these efforts.

- **Autonomy.** Too often there are perceived (or actual) threats to autonomy.
- **Fragmentation.** Occasionally efforts are fragmented and are conducted in an "ad hoc" fashion. If effective involvement is the objective, a sense of unity must be built.
- **Government policy.** Government policies and practices may impose a certain amount of reticence on the part of the private sector—especially where Federal incentives exist to engage in such efforts. Also, mistrust may have been fostered by previous negative experiences with some government programs.
- **Imposition of mandates.** One-sided mandates that are imposed from above can be a major problem.
- **Inertia.** It is not unusual to find some organizations holding fast to traditional processes, as some may have a propensity for rigidly maintaining existing structures. If there is built-in inflexibility and resistance to change, involvement may be stillborn.
- **Innate differences.** Businesses are obviously concerned with delivering goods and services for a profit.
- **Institutional flux.** The promotion or reassignment of business personnel and the reorganization of an organization may hamper continuity and keep involvement on a low level.
- **Interpersonal problems.** Such problems may have resulted from poor past experiences.
- **Lack of commitment.**
- **Lack of communication.**
- **Lack of knowledge.** Inadequate understanding of the other groups' procedures, roles, and points of contact can lead to mistrust.
- **Lack of leadership.**
- **Lack of planning and follow-up.**
- **Legislation.** Some businesses may be willing to enter into cooperative arrangements but may hesitate because of perceived legal restrictions dealing, for example, with minimum wage laws, liability and workmen's compensation, security, safety, and insurance-related concerns.
- **Minimal participation of small businesses.** Small businesses often are resistant to participation because they may lack the staff and time for such efforts.

- "Outstretched-hand syndrome." If schools enter into cooperative agreements based on only what they can gain, it is better that they reconsider their efforts.
- Special interests. Although all organizations pursue their own self-interests, some interests may be so far afield from the schools that the gap may never be closed.
- Staff training. Few persons come prepared for involvement. Staff orientation and training to the school-community involvement process is necessary.
- Turf and protectionism. Unfortunately, "turfdom" can be a major problem.
- Unreal expectations. If participant expectations are too high, they will never be realized and may stifle further efforts. The school-community involvement process offers no magical solution to all problems. It simply is a way of addressing some of them.
- Variances in terminology. Two different languages may be spoken, neither of which is appropriate: "educationese" and "businessese."

As in any endeavor, knowing the potential obstacles is the first step in overcoming them. Fortunately, many positive ways exist to facilitate school-community involvement. These factors should aid in overcoming the major barriers.

Access. Successful involvement does not occur unless groups have access to one another. This includes open lines of communication and a flexible administration that allows agreements to develop.

Awareness. Involved organizations must be familiar with the goals, characteristics, and needs

of the groups with which they hope to become involved.

Incentives. If directives are imposed top down, the incentives will be weakened. Anticipated rewards and other visible benefits should create an inducement to establish ties.

Systematic planning. It takes time to develop mutually acceptable plans. This can only be done when organizations take clearly defined steps to consider a range of options, objectively analyze the strengths and weaknesses of each, and gradually build a consensus that all can support.

Team building. Team building requires developing a relaxed atmosphere, defining roles and responsibilities, and preparing thoroughly. It also requires sensitivity, mutual respect, and creative leadership.

Time investment. A continuous investment of time often is needed to make involvement work. A genuine effort to develop effective involvement starts by knowing that each group understands this important fact.

Transactions of "exchangeable items." Involvement requires that exchangeable items—information, personnel equipment, and services—be identified. Transactions indicate that each group offers something of value and receives something in return.

Trust. Mutual respect must be established. A variety of means can be used, including ensuring that all information exchanged is accurate, avoids competition, and maintains unbiased views.

In short, only when groups realize that involvement is to their mutual advantage can sufficient commitment of time and resources be generated to ensure success.

Some Suggested Guidelines

The guidelines below are reported by a number of practitioners who have been active in this area over the years. The items represent, in effect, some of the primary "do's-and-don't" of school-community involvement.

Gain Administrative Support

Administrative support must go beyond a verbal commitment. Tangible support in terms of time and resources are needed. For example,

it is best that a school-community involvement program coordinator be assigned full-time to that role; if this is not possible, the coordinator will need scheduling flexibility and freedom of movement.

Gain School Board Support

School-community involvement plans are unlikely to succeed without a school board commitment that reinforces the school's interest in the involvement concept. Ensure that the most recent board policies are available to any planning committees that are established. Also, formally request that the committee's recommendations for school-community involvement be adopted as official board policy. Such a request normally would present a strong rationale for board support of any specific recommendations.

Clarify Goals and Objectives

Although a list of goals may not be lengthy, it typically describes those things which are being sought to accomplish. Defining purposes and limits, especially in writing, can subsequently guide the more detailed planning that must follow.

Recognize Mutual Needs

To warrant the time, effort, and resources required for effective school-community involvement, the need and benefits clearly must be perceived "early on."

Make Thorough Initial Plans

A good survey of community needs followed by carefully designing programs to meet those needs will serve the school and the community. Return on effort is maximized by such a process. The "action plan" (exhibit 3) and the planning matrix (exhibit 4) should be helpful in this regard.

Identify and Involve Appropriate People

Because persons in different organizations with the same title may have different functions, or persons with the same functions may have different job titles, do not rely on job title alone. Identify the person or persons who have decision-making responsibilities. Study the organization's structure to learn the "flow" of responsibility and the most appropriate "entry points." The school board must approve of the undertaking; administrators must ensure that the plans can be accomplished within the schools' capacities; and teachers must recognize the need for collaboration. The best way to ensure widespread commitment is to involve a planning committee that represents the school's and community's interests and needs. However, in seeking to involve the appropriate people, do not confine your attention solely to committee membership. Other important community leaders who are not on the planning committee need to be informed about the effort as well as about on-going progress.

Review Organizational Information

Before contacting an organization, review its products and services, structure, and personnel in order to be able to talk knowledgeably about it. Also, review what you may know about potential facilitating factors or possible problems. If an organization has had a negative school experience in the past or has never been involved with schools, you should be aware of this.

Use a Variety of Approaches

Select the most appropriate approach for each situation. Experienced school-community coordinators suggest these three initial approaches: (1) "We have a service . . .," (2) "You have a need . . .," and (3) "I would like to explore . . ." Learn to "read" the situation and select the best approach. Also, the approach used for small- or medium-sized businesses likely will vary from the approach used for larger corpora-

EXHIBIT 3

INITIATING AN ACTION PLAN

The following is an example of the steps needed to initiate an action plan:

1. *Identifying a range of programs.* By the end of this step, the planning committee should identify and clarify approximately 20 program options to consider. These programs should reflect the variety of perspectives held by the committee and the organizations they represent.
 - Activity 1.1: Brainstorm to develop a list of options.
 - Activity 1.2: Clarify brainstormed programs to ensure that everyone understands the options and to add new program ideas that come to mind.
2. *Identify preferred programs.* By the end of this step, the planning committee should shorten the list to approximately five preferred programs. This list should include each committee member's preferences from the longer list.
 - Activity 2.1: Adopt criteria that the committee can use to identify its preferred programs, that is, programs which have the greatest committee support.
 - Activity 2.2: Advocate one program by having each committee member present a case for one favorite program.
3. *Select one program to plan.* By the end of this step, the planning committee should select the one program to further plan and implement. Choose this program after careful consideration of everyone's preferred program and concentrated effort to achieve consensus.
 - Activity 3.1: Identify the advantages and disadvantages of each preferred program.
 - Activity 3.2: Select and, if necessary, modify one program so that all committee members can support it.

SOURCE: Adapted from Gold (1985)

EXHIBIT 4

PLANNING MATRIX

The following matrix will help assure you that you have "touched all the bases" in your planning efforts:

Potential type of school-community involvement: Community resource group:	Advisory committee	Apprenticeship training	Business/industry partnership	Career education strategies	Collaborative councils	Community compacts	Community events	Cooperative education	Customized training	Job shadowing	Personnel exchanges	Shared equipment	Staff development	Summer employment	Technical skill updating	Training for the unemployed	Others:
Business and Industry																	
Community-based organizations																	
Civic and quasi-political organizations																	
Civil rights groups																	
Government agencies																	
Labor organizations																	
Professional groups																	
Religious organizations																	
Service clubs																	
United Way or United Fund sponsored organizations																	
Others:																	

tions, as their questions and concerns likely will be different

Assess Current School-Community Involvement Activities

Assessing the current status of involvement will provide a solid baseline for developing new plans and approaches. Information collected might include the number of current advisory groups, the number of citizens involved, the number of community resource persons used, and so on. Also, consider what current activities should be continued, modified, or discontinued—as well as what new activities should be initiated.

Determine Staffing Needs

What professional and clerical staff will be involved in the effort? In what ways will they be involved? Will any new staff be needed, for example, a full-time program coordinator? Every effort should be made to match individuals' skills and interests with appropriate activities.

Determine Budgeting Needs

What funds do you presently have to support the effort? What funds might be required for such items as postage, duplication, clerical support, professional staff, supportive materials, and the like? What options are available for securing additional funds? Do not oversell, overkill, or overwhelm participants, but rather take only the necessary first steps. The first meeting typically is an orientation session that lays the groundwork for the future.

Schedule and Document Activities

Once your priorities are determined, prepare a time schedule of what actually needs to be done and when. For the purposes of accountability and future references, it is important that you document all activities. Written agreements help achieve the successful completion of joint school-community endeavors. When the responsibilities of each party are clearly stated, misunderstandings are reduced and performance is improved.

Develop Promotional Materials

It is important to create external awareness of and interest in school-community involvement. Personal contacts should be supplemented with informational materials that explain the potential involvement effort and convince others to participate. Brochures, slide/tapes, flip charts, and simple handouts all have been used successfully.

Be Professional

Look for successful program models in other school systems. Learn how the programs were set up, what the problems were, and how they were overcome. Do not use educational jargon. Not only will you likely not be understood, but you risk alienating your listener. Be professional in your contacts. Never just "drop in to say 'hello'" with busy executives and always follow the prescribed chain of command. Also, remember that what you learn during your meetings must be treated confidentially. Use interpersonal skills. Be patient and persistent, listen actively, be flexible, do not promise more than you can deliver, and—most important—do not ask organizations to do the impossible.

Develop an Evaluation Plan

Evaluation, whether formal or informal, formative or summative, is always beneficial in terms of planning better programs. Assessing each element of school-community involvement as it progresses, and at the end, ensures profitable future programs.

Nurture the Involvement

Once joint school-community involvement arrangements are underway, the challenge is to keep the initiative moving. If obstacles have been anticipated, the task will be easier. The following "tips" on keeping the initiative on track may be helpful:

- Expect problems and budget time to deal with them. Even the most thorough planning cannot account for all contingencies.

- When lack of progress threatens the undertaking, review the process, emphasizing where the ability to resolve problems already as been demonstrated.
- If you are unable to resolve a critical problem, do not move ahead until it is solved. Resolutions will become easier in the future.
- Plan your work with a view toward conflicting or competing time requirements. If, for example, your major activity in preparing for involvement occurs simultaneously with an agency reorganization, the chances are the involvement effort will come in second.
- Once it has been decided that school-community involvement will be implemented, all staff should be thoroughly oriented on what will be expected. If staff is

involved early, they are likely to make greater commitment to the effort.

Some Concluding Questions

Some important questions to consider are the following:

- Are the right people included? Is the activity being initiated at the appropriate organizational level? (People questions)
- Were all important bases touched before decisions were made? Were resources adequate for the activity? (Process questions)
- Does the plan seem rational and achievable to major participants? Are the events and resources in proper proportion to the task? (Logic questions)

Recommendations from Research

In addition to the previous recommendations, a recent study of the National Center for Research in Vocational Education "Interagency Linkages: A Field Study" (Facts & Findings 1984) reached some relevant conclusions.

Organizations considering involvement with others should first identify their resource needs and then *look to organizations with complementary needs.*

Mandates for interagency relationships should be consistent for all member organizations. One type of organization should not be required to participate whereas others are only encouraged to do so.

Organizations should *clarify areas of agreement and disagreement.* Begin with mutual understanding of problems and plan around them, rather than encountering them later when they might cause the relationship to fail.

Programs should begin slowly. This is particularly important where more complex involvement is a longer-range objective. Small successes encourage commitment to attempt more difficult undertakings. Areas of involvement

should be chosen in which *the procedures are standardized in each of the organizations involved. This promotes mutual understanding and effective communications. In the early stages, involvement should be flexible.* Then partners can work out disruptions with few constraints.

Attend to all levels of the organizations that will be affected by the involvement. Solid efforts develop when all elements of the organizations intermesh with little disruption. If involvement is only at the top, while the other levels find it difficult to work together, the relationship is unlikely to continue.

Realize that *some conflict is inevitable.* Establish procedures for resolving conflicts in advance.

A research synthesis report by Schilit and Lacey (1982, pp. 83-88) presented the following somewhat similar conclusions:

- Commitment of school superintendents and company chief executive officers is *fundamental.*

- Local Chambers of Commerce and other business associations effectively mobilize city-wide resources.
- Ample time and resources must be available for planning prior to start-up.
- A small, manageable pilot with potential for growth is a good place to begin.
- An evaluation design built in from the start provides feedback on performance and results.
- Corporate in-kind services and personnel supplement school funding.
- Quality staff are crucial, particularly a director respected by educators and business leader
- Employers must identify specific worker attitudes and skills they require to match

youth qualifications to jobs and/or training. Careful attention to screening assures successful experiences for youth and companies.

- Structured preemployment training is necessary to address local employer expectations and requirements.
- Companies are willing to train or provide temporary jobs for in-school youth since no permanent job commitment is required upfront.

In addition to the recommendations, the report also described 55 school-business partnerships in the following categories: classes in business and industry, public-private initiatives, curriculum revitalization, teacher internships, adopt-a-school programs, work-study, summer youth employment, and career exploration.

Involving Postsecondary Schools

Avenues for Articulation: Coordinating Secondary and Postsecondary Programs, a study conducted by the National Center for Research in Vocational Education, Long et al. (1986) provides a number of guideposts for improving secondary-postsecondary connections. The study notes two major models for secondary-postsecondary occupational articulation training efforts: the time-shortened and the advanced skills model.

The main purpose of the *time-shortened program* is to eliminate unnecessary redundancy in order to grant advanced placement to students entering a 2-year college program. As a result, they complete an occupational certificate or associate degree program more quickly than the normal postsecondary program would allow. Such programs take many forms, depending primarily on whether the articulation responds to a state mandate or to local needs.

The main purpose of *advanced skills programs* is to streamline occupational training for grades 11-14 in order to incorporate more advanced training into the curriculum than a traditional postsecondary occupational program

would allow. The intent is to graduate students at a master technician level, mainly for industries and businesses adopting high technology. Several types of advanced skills programs exist, including variations on "2 + 2" programs, that is, vocational-technical programs that coordinate occupational training for grades 11-14—2 years of high school courses—plus 2 years of postsecondary technical courses.

Regardless of which articulation model is followed, the following guideposts are applicable:

- Articulation agreements should be in written form.
- Benefits to all partners should be mutual.
- Commitment and leadership should come from top levels.
- Communications should be open, clear, and frequent.
- Curriculum should be competency-based.

- Faculty involvement should come early in the process.
- Goals, at least the initial ones, should be modest; they also should be mutual and not based on individual "turf."
- Relationships should be based on mutual trust and respect.

- Responsibilities should be clearly defined.

Although effective articulation requires substantial investments, the rewards in terms of service to students and potential employers, program improvement, and good interinstitutional relationships far outweigh the costs.

Involving the Labor Community

The labor movement has a special role to play in school-community involvement as high school graduates at some time become members of the workforce. In a number of communities, union members are actively involved in leadership roles in local school boards. There is no question about the importance of having labor representatives in such positions, because school policies are either determined or approved by such groups. Also, school trips to work sites or union halls on a regular basis can be effective, particularly if a union official explains such topics as collective bargaining and the social-educational-political roles of unions. Counselors and teachers should become familiar with and make their students familiar with apprenticeship training opportunities.

Here are several points to consider regarding labor linkages:

- Good communication begins when school people sincerely seek to understand organ-

ized labor and take the initiative in establishing personal relationships. The attitude of "let them take the first step" is inappropriate.

- Goals of schools and labor are much more common than most people realize. Both groups are concerned with preparing youth for productive and satisfying employment. This major goal, although not the only common one, should be enough to build the foundation for meaningful school-labor involvement.
- Teachers must recognize the importance of organized labor in our society. Many excellent curriculum units on the role of labor in America are available; staff development opportunities for the effective use of those materials also should be offered.

Evaluating School-Community Involvement

In evaluating school-community involvement projects—and all projects for that matter—be concerned with both processes and outcomes. Because expectations and hopes tend to exceed results in nearly all new undertakings, develop procedures that enable the best job to be done with the resources at hand. The outcomes can then be judged in relation to the resources and the quality of the effort.

The two broad types of evaluation to consider are formative and summative. Formative evaluation allows "midcourse corrections" to

ensure that the program is developing as it was conceived. It is designed to provide a continuous flow of information to assist in redirecting program goals and procedures. Summative evaluation allows for the planning of effective future involvement efforts. It is designed with the end result or "bottom line" in mind. It distinguishes a program as successful or unsuccessful compared to a set of preestablished criteria or to the relative success of some other program. In this case, the basic intent usually involves resource allocations, program expansion, or termination decisions.

Some "starter" evaluation questions are listed below. Others may be added as appropriate.

- What is the relationship between program costs and program outcomes expressed in dollars?
- What is the relationship between program costs and outcomes where the latter are not measured in dollars?
- What are the inputs into the program in terms of number of personnel and other

descriptors of levels of activity and effort in the program?

- What are the effects of the program on students?
- How effective are staff in carrying out their assigned tasks and accomplishing their individual goals?
- What are the strengths and weaknesses of day-to-day operations?
- What are the available alternatives and, given those alternatives, what is the optimum way to conduct the program?

The Coordinator's Role in School-Community Involvement

The School-Community Involvement Coordinator

The coordinator takes the lead in making involvement happen. This assignment might fall to an administrator or be delegated to another appropriate staff person. No matter who coordinates this important process, he or she will need to perform the following nonmutually exclusive roles:

- **Broker.** In the role of a "go-between," coordinators need to find the right conditions that permit each group to be involved most efficiently. They need to monitor the process and at times intervene to resolve any problems that arise.
- **Consultant.** The role here may simply be to ask the right question of the right person at the right time, or make the right suggestion. Coordinators initiate discussions and precipitate the involvement of others.
- **Facilitator.** Coordinators need to "make things happen." For example, they must keep activities on target and on schedule.

In short, coordinators are responsible for planning, developing, and implementing the school-community involvement program. To prepare for this role, individuals should participate actively in civic and community affairs. Because the coordinator's staff also should be encouraged to participate, he or she should serve as a model.

Fortunately, coordinators do not, should not, have to "go it alone." Coordinators work within an active committee structure, especially as they assess the local climate for school-community involvement. To identify the appropriate individuals for such a committee, as we have indicated, coordinators have a number of resources at their fingertips. To the extent possible, the committee should be broadly representative of all community interests; however, keep in mind that the committee members also have other schedules and demands.

What Competencies Are Needed?

When assessing individuals' abilities for the coordinator position, consider the following competencies:

- **General Characteristics**
 - Enjoys working with others
- **Attitudes**
 - Follows as well as leads
 - Is persistent in working toward goals
 - Is flexible
 - Remains patient—even when change is slow

- *Knowledge of the Community*

- Is able to explain how services to schools can benefit communities
- Is aware of local economic development activities and what new industries are moving into the area
- Knows the general status of the local, regional, and state economies, the unemployment rate, and what firms are hiring or laying off workers
- Knows what major human resource needs must be met in the local economy
- Possesses insights into organizational development, knows where authority rests, and understands the goals of community organizations
- Possesses insights into the change process, and understands that change is a "process" rather than a single event
- Understands the characteristics of both large and small businesses
- Understands the terminology and operations of the business community

- *Knowledge of Educational Issues*

- Is familiar with current educational issues, such as competency testing and quality circles
- Understands how education/training is funded
- Understands the major "workings" of the school system, new curriculum offerings and types of vocational programs

- *Knowledge of the Facilitators of Involvement*

- Is aware of financial incentives that could support joint involvement, tax credits and training funds
- Understands legislation that is relevant to school-community involvement (e.g., Carl D. Perkins Vocational Education Act, Job Training Partnership Act)

- *Skills*

- Possesses good interpersonal skills: works as a team member, cooperates, listens well, compromises when necessary, communicates effectively, attempts to resolve conflicts, and "reads" non-verbal communication well
- Possesses good management skills, is well organized and manages time well

Last, here are several suggestions to assist the coordinator in increasing his or her competencies:

- *Become familiar with information* in local and State data banks, bureaus of employment services, and State Occupational Information Coordinating Committees.
- *Become familiar with economic issues* by reading national journals and newspapers, such as the *New York Times* and *Wall Street Journal*.
- *Become familiar with relevant legislation.* Read the *Federal Register* and *Commerce Business Daily*.
- *Begin to make personal contacts, visits to offices, and tours of facilities.* Get to know personnel in economic development agencies, manufacturing associations, and professional organizations. Also, be in touch with training directors of businesses and industries.

Appendix

INVENTORY

I. Business and Industries

Company _____

Address _____

_____ Telephone _____

Contact Person _____

Position _____

Field Trips

1. Would your company be available for a field trip? Yes _____ No _____

2. What are the activities student might observe? _____

Processing _____ Sales and Service _____

Manufacturing _____ Accounting _____

Other (please explain) _____

3. How many students can be accommodated at one time? _____

4. How many times per year would you be willing to have student groups? _____

• Best time of year _____

• Best time of week _____

• Best time of day _____

• How much time is needed for a visit? _____

• Are there eating facilities? Yes _____ No _____

• Are any safety devices (glasses,
hard hats) needed by the students? Yes _____ No _____

5. Are there other aspects of the tour that should be called to the attention of those arranging
the field trip? _____

(continued)

Work Experience

1. Are there opportunities for placing students in your business?

Yes _____ No _____ If Yes, please answer the following:

2. What type of experience is available?

Part-time, unpaid Yes _____ No _____

Part-time, paid Yes _____ No _____

Full-time, paid Yes _____ No _____

Observation only Yes _____ No _____

Other _____

3. If you answered "yes" to any of the above, who should be contacted to work out details:

Name _____

Position _____ Telephone _____

Equipment Lease, Loan, or Gift

1. Does your company have a policy regarding leasing, loaning, or donating equipment?

Yes _____ No _____

2. What equipment do you have that might be useful in any of our programs, particularly vocational education?

3. Who should be contacted to discuss possible agreements regarding available resources?

Name _____

Position _____ Telephone _____

II. Community Organizations

1. Organization _____
2. Address _____

3. Telephone _____
4. Executive officer _____
5. In what educational activities does your organization engage? (Check all that apply.)
 - Host students at luncheons and meetings Yes _____ No _____
 - Provide scholarships Yes _____ No _____
 - Provide brochures and other descriptive material Yes _____ No _____
 - Sponsor students in programs, workshops, or other events (e.g., camps) Yes _____ No _____
 - Sponsor student exchange in U.S. or abroad Yes _____ No _____
 - Provide resource persons Yes _____ No _____
 - Other educational activities not covered above _____

III. Community Resource Persons

1. Name _____
2. Title _____
3. Organization _____
4. Address _____
5. Telephone _____
6. Duties commonly performed _____

(continued)

7. Specific areas of interest/potential contributions _____

8. Days of the week and most convenient time:

Days — M T W Th F
Time — Morning Afternoon

9. Most appropriate grade level or levels: (check all that apply)

7 — 8 _____
9 — 10 _____
11 — 12 _____

IV. Governmental Agencies

1. Agency _____

2. Address _____

3. Name and title of chief executive officer _____

4. Telephone _____

5. What specific services are provided by the agency? _____

6. Are materials available that explain the service? Yes _____ No _____

7. What educational activities is the agency able to provide?

Resource persons Yes _____ No _____

Field trips Yes _____ No _____

Work experiences Yes _____ No _____

Other _____

(continued)

8. What materials are available that explain career opportunities in the agency?

Brochures Yes _____ No _____

Films Yes _____ No _____

Filmstrips Yes _____ No _____

Posters, charts Yes _____ No _____

Others _____

9. Other suggestions for relating to school programs: _____

REFERENCES

- Gold, Gerald G. *Collaborate with the Community*. Competency-Based Career Guidance Modules series, Module CG-A-3. The National Center for Research in Vocational Education. Wooster, OH: Bell & Howell Publication Systems Division, 1985.
- A Guide to Linkage in Action: Selected Models*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1964.
- Gysbers, Norman C. *Improve Public Relations and Community Involvement*. Competency-Based Career Guidance Modules series, Module CG-B-3. The National Center for Research in Vocational Education. Wooster, OH: Bell & Howell Publications Systems Division, 1985.
- Hoyt, Kenneth B. *Career Education: Where It Is and Where It Is Going*. Salt Lake City: Olympus Publishing Company, 1981.
- Hoyt, Kenneth B. *Refining the Concept of Collaboration in Career Education*. Washington, DC: U.S. Department of Health, Education, and Welfare, Office of Career Education, 1978.
- "Interagency Linkages: A Field Study." Vol. 2, no. 16 of *Facts & Findings*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1984.
- Involve the Community in Vocational Education*. Competency-Based Vocational Education Administrator Module series, Module LT-F-3. The National Center for Research in Vocational Education. Athens, GA: American Association for Vocational Instructional Materials, 1983.
- Long, James P.; Warmbrod, Catherine P.; Faddis, Constance R.; and Lerner, Max J. *Avenues for Articulation: Coordinating Secondary and Postsecondary Programs*. Research and Development Series No. 259. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1986.
- Reconnecting Youth: The Next Stage of Reform*. Denver. Business Advisory Commission, Education Commission of the States, 1985.
- Schilit, Henrietta and Lacey, Richard. *The Private Sector Youth Connection*. Volume 1. School to Work. New York, NY: Vocational Foundation, Inc.,

PLACING STUDENTS IN JOBS

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Introduction

Placing Students in Jobs is a planning resource designed to assist administrators, teachers, counselors, and other school staff in further developing their job placement efforts. It presents an overview of job placement—what it is and why and how it is accomplished—and provides strategies for developing, implementing, and evaluating job placement programs.

Although this document represents a synthesis of numerous publications on the topic, it focuses only on selected aspects of job placement. The intent is to provide a means by which users can further design job placement programs that meet the school transition needs of their students.

What are the Major Benefits and Goals of Placement Programs?

Placement typically is defined as any school activity that helps students take the next step toward work and/or further schooling. School-based placement services are designed primarily to assist students in developing and implementing their plans, either for immediate employment upon graduation or for further schooling followed by eventual employment.

Benefits

Transitions from school to work often are difficult. An effective placement program, however, can be the bridge students need to manage these passages with ease. Although many youth may have the knowledge, skills, and attitudes needed for employment, too often they do not know how to take the next steps. An effective placement program, however, can provide students a number of discernable benefits. It can—

- be a valuable clearinghouse for job information;

- broaden career options through job development or by facilitating further training;
- serve as a broker for non-school activities, since other community agencies may provide some placement activities;
- supply up-to-date labor market information to help students make informed career decisions;
- help schools evaluate other educational programs, using its records on students' success in obtaining and retaining employment or in continuing their education; and
- improve the school's image in the community.

Goals

The primary goal of placement is to provide students with services in order to meet their

school and work transition needs. To achieve this end, schools need to be aware of the multiple nature of students' placement needs and act (as an advocate) to meet each student's unique needs.

Placement activities obviously must *enable students to obtain employment*. To this end, the following specific goals are applicable:

- To help students develop career plans
- To provide students with current educational and occupational information
- To provide training in job search skills
- To assure that students have attained adequate skills in performing entry-level jobs
- To provide students with job-adjustment skills

Placement programs also should *establish lines of communication with community groups, businesses, unions, and government agencies*. This goal aims at facilitating students' entry into the job market by means of such specific goals as the following:

- To establish liaison with government employment services
- To foster good working relationships with work-study and coop programs and government employment and training programs
- To work with employers to increase employment opportunities
- To arrange for students to gain work experience through part-time jobs

Lastly, data collected by a placement program can *be useful in achieving program improvement*. The specific goals here include the following:

- To keep records of the number of students placed by area of work, geographic location, and sector (public or private)
- To identify areas in which students had difficulty obtaining jobs
- To maintain records on former students' career progression and on unemployed students

What Are the Main Types of Programs?

Many factors influence students' career decisions. Students' chances of entering certain careers are influenced by *all* of their experiences, not only by placement activities. Placement activities fall in three general categories:

- *Career education*—activities designed to meet the necessary entry requirements of a job (for example, coursework, specific skill training, work experience)
- *Career guidance*—activities designed to help students identify, assess, and choose placement alternatives (for example, counseling, self-assessment, career and labor market information)
- *Career placement*—activities designed to promote students' self-sufficiency in career matters (for example, career planning, job search skills) and to increase opportunities

available to students (for example, referral activities, job development)

Since a student's placement opportunities are affected by all of the above, responsibilities must be shared by teachers, counselors, and administrators. An effective program, whatever the design, depends on broad-based, total staff commitment to these three elements.

Placement programs can be designed in a variety of ways, depending on the underlying program philosophy. A number of examples are briefly described in this section.

Program Models

Three generic program models can be identified: labor exchange, client-centered, and client-advocate.

Labor exchange. This model is intended to increase the employment opportunities available to students. The program staff plays a mediating role between students and employers by encouraging the latter to use "prescreening" methods which, in theory, reduce employers' hiring costs. The primary activities in this approach are locating job openings, developing additional job opportunities, and providing employers with qualified applicants. Evaluation emphasizes the number of placements.

Client-centered. This model focuses almost entirely on improving the student's likelihood of being placed by emphasizing student independence. No attempt is made to increase the number of positions available by working with employers. The program provides students with information and training in locating job leads, following up on leads, developing resumes, applying for jobs, and interviewing. Direct employer contact by the school is rare. This approach essentially views placement as a discrete event rather than a continuous process.

Client-advocate. This model considers placement as a function of both student skills and preparation and the availability of opportunities. Placement becomes central to both program planning for the school and career planning for the individual. Services provided to each student, including job development and job search training, are different.

State Models

Some states have structured statewide placement (as well as follow-up) programs that are mandated by law. Obviously, this has a direct effect on local school districts.

In some cases, legislation requires districts to provide placement services to all students. Generally, it is the responsibility of individual districts to provide supportive staff; frequently, the result is a districtwide system of placement programs. Guidelines and implementation procedures may be developed by the state, with district staff providing services to local schools.

In several states, centralized, comprehensive programs are administered through regional education service units. States that have devel-

oped guidelines for comprehensive programs usually encourage schools to cooperate with public employment service agencies. Often these states also suggest methods for coordinating employment services for special needs groups

Most models specify that state staff provide inservice education for local guidance, instructional, and administrative personnel. Often public relations activities, job development efforts, and follow-up studies also are conducted by state staff in support of local programs.

Statewide programs have several benefits. They reduce local costs; provide consistent local, regional, and state data on employment trends, program effectiveness, and student success; and guarantee a minimum level of local training.

Collaborative Models

Placement programs can be administered by a variety of agencies in various combinations. For example, two or more schools may co-sponsor programs; business, industry, and labor may offer cooperative programs; or government agencies may provide coordinated services. These arrangements provide jointly-administered, centralized programs.

The most common collaborative model involves city-wide job placement services operated by a central administrative staff. Job development and placement staff register and interview students and conduct preemployment training in the schools. Placement coordinators may be housed in the schools or school staff may be designated to work with central office personnel.

Placement for Part-Time Jobs

Some school placement programs provide placement services for part-time jobs. The rationale is that these services provide numerous benefits for students: valuable work experience, a chance to earn money, and an opportunity to become familiar with various occupational roles. Some schools confine placement services to locating cooperative work

experiences in which students can develop occupational skills. Even schools that decide not to become formally involved in part-time placement occasionally receive requests from employers.

Part-time job experiences are valuable, particularly for students with poor academic

records who often need to be identified early; developing a good work record may compensate for their weak academic performance. Also, students who face economic difficulties often need to find a paying job in order to stay in school.

Planning for Job Placement

Steps in Developing a Placement Program

According to the literature in this area, the following five steps are necessary in order to establish an effective placement service: form a planning committee, form an advisory committee, assess needs, identify staff, and develop a public relations program. Let us take a brief look at each step

Form a Planning Committee

A placement planning committee usually is temporary and is dissolved once its tasks are completed. Its responsibilities normally are to determine specific program objectives, establish geographic limits on placements, and set up operating procedures.

In addition to selected school staff, the committee members typically include employer personnel responsible for making hiring decisions. Other members often include representatives of employment agencies, placement programs in neighboring schools, and community organizations.

A primary function of the planning committee is to establish program goals and objectives. These goals and objectives, for the most part, determine what kind of services are offered, which students will be targeted for the most intensive services, and how the program will be structured. Here are several questions the committee should consider:

- What are your community's employment patterns?

- Will your program attempt to identify existing opportunities or will it become involved in job development?
- How will you keep information on job opportunities current?
- What policies will be used to avoid discrimination?

In the planning stages it is essential to gain the up-front support of the school board and school administration. This already may have occurred if you have been assigned responsibility or given permission to set up a program. If not, you will need to gain support from the board of education and the administrative staff as well as from teachers, guidance personnel, and others who may play a role in implementing placement programs. The committee's recommendations as well as a tentative budget usually must be approved by the school board.

Form an Advisory Committee

A permanent advisory committee can serve as a link to the community and possibly even offer assistance in placing students. It normally consists of the same types of business, labor, government, and community representatives who served on the planning committee; in fact, you might consider inviting some of the same persons to serve on both.

The advisory committee typically serves as an intermediary, attempting to bring the school

and community together around a goal beneficial to all, namely, increased and more appropriate job placement for graduates. Among the committee's duties are "scouting out" jobs for students by making employers aware of the program and recommending ways in which educational programs could be modified to prepare better students. Some committee members also might assume a degree of responsibility for preparing employers to receive handicapped or limited English-proficient students.

When forming a committee, it is important to establish clear operating procedures and responsibilities and make these known to prospective members. Urge them to accept committee appointments only if they can meet your expectations. Sources of advisory council and planning committee members are provided in the resource guide on involving the community in transitions.

Assess Needs

Once the planning committee is established and advisory committee members are identified, the work of assessing the institution, student, community, and employer needs and resources normally begins. Consult the resource guide on follow-up for the specifics of conducting needs assessments and surveys. Two types of survey you might wish to consider are school surveys and student surveys.

School survey. The school survey typically identifies current placement activities. It is likely that vocational teachers will be helping students find jobs; cooperative education coordinators also often place students in jobs during the school year and often help them obtain jobs when they graduate.

These and other staff members should be interviewed in order to determine the extent of their involvement in placement activities, community contacts they have established, and the problems they have encountered in the past.

New programs should be coordinated as closely as possible with existing activities to gain the support of staff who already are involved. It is important that you make clear to your colleagues that they will be encouraged to

continue their efforts and that any new program efforts will supplement rather than supplant their activities. Also, their participation in the student and community surveys is essential.

Student survey. In order to determine the needed services, it is essential to identify student needs. Although student files contain much data, student questionnaires will provide additional valuable information. Before you start, it is important to identify the information needed, develop your procedures, and design a means of analyzing the information. Much of the information can be obtained from follow-up data on former students. This data will help in identifying placement problems encountered by students after they leave the institution.

Among other things, the questionnaire identifies students' goals and their educational and employment plans. It is suggested that the questionnaire include specific questions to determine career goals, education or training plans, relationship between plans and career goals, projected educational program, and past employment experiences. Exhibit 1 presents an example of a student placement needs survey questionnaire that can be adapted to fit your information requirements.

The student files contain such useful information as past and current courses, grades, test scores, indicators of aptitudes and achievements, special needs, attendance information, extracurricular activities, health records, work experiences, and socioeconomic information. This information, combined with the results of the questionnaire, should enable you to assess needs thoroughly and accurately.

Community and employer surveys. It also is important to survey your community in order to assess available occupational and educational resources. If a follow-up program has been established, the resulting data often can be used to determine the needs of local employers. Although information from the local community is essential, related state and national information also is valuable, particularly as it relates to supply and demand trends. Considerable information at the Federal level can be found in such U.S. Department of Labor publications as the *Occupational Outlook Handbook*, the *Occupational*

EXHIBIT 1

SAMPLE STUDENT PLACEMENT NEEDS SURVEY

As you begin to make post-high school decisions, we would like to help you get the more current information you need. Please fill out this form so that we might contact guest speakers, arrange field trips, and purchase materials of interest to you.

PART I

1. The occupations in which I am interested:

First choice _____

Second choice _____

Third choice _____

2. Training programs in which I am interested:

First choice _____

Second choice _____

Third choice _____

3. Colleges and universities in which I am interested:

First choice _____

Second choice _____

Third choice _____

4. Branch of military service in which I am interested:

5. Volunteer programs in which I am interested:

EXHIBIT 1—Continued

PART II

Please check the information areas that you feel you need.

Information Areas	Yes	Maybe	Not really interested
Completing applications			
Finding job leads			
Interviewing			
Calling employers for an appointment			
Selecting a school or training program			
Completing the G.E.D. (high school equivalency)			
Writing resumes			
Managing money			
Setting up a small business			
Getting along on a job			
Better study or work habits			
Employee rights			
Equal opportunities hiring practices			
Other areas: _____			

tional Outlook Quarterly, and the *Guide for Occupational Exploration*.

The National Occupational Information Coordinating Committee (NOICC) has implemented an occupational information system at the national, state, and local levels. NOICC works in conjunction with State Occupational Information Coordinating Committees (SOICCs) to develop a wide-ranging system for disseminating occupational information. Various computerized packages for school use are available from SOICCs.

Specific information about your community can be acquired through personal contact, telephone, and/or mail surveys. Although mailed questionnaires are the least time-consuming and least expensive, they produce the least information. Therefore, although you may choose this approach to reach a large number of respondents, you will probably need to follow up by telephone or in person.

The primary groups to survey are business-oriented organizations such as the Chamber of Commerce, many of which conduct their own surveys and will undoubtedly share their results. They also may be willing to work with you in conducting a joint survey. Other groups to contact are local offices of the state employment bureau, service clubs such as Kiwanis or Lions, youth organizations, private employment services, labor organizations, and other educational institutions, such as colleges and technical schools. Staff members at these organizations can provide information on employment needs and trends, the attitudes of local businesses toward specific educational programs, potential employers for your students, and opportunities for hiring special needs students.

At this point, you probably will need to follow up on those contacts and expand the list. Refer to the resource guide on school-community involvement to see the types of community groups that can be of assistance.

After identifying the resource groups, you will want to contact them to determine the services they can provide to students. Here are some examples: apprenticeships, career and occupational information, counseling for special needs, educational and training opportuni-

ties, full-time employment, health services, instructional materials, part-time and/or summer employment, tutoring, and vocational rehabilitation.

Identify Staff

The key to a successful placement program is the staff. You will need to decide in the planning phase how you will use your staff and whether you will need to add personnel. Although you may be just starting a formal program, many types of placement activities may have been developed already. For example, individual teachers, and counselors have probably been active in job placement and should be involved as formal programs are established.

Staff qualifications. In general, all staff should be experienced in helping students develop their educational and occupational goals. Knowledge of labor market and occupational information is important, along with such knowledge and skills as the ability to establish rapport with students, the ability to work with employers, a knowledge of labor laws and fair employment practices, and an understanding of advanced vocational-technical programs.

Since a wide array of tasks are involved, an equally wide choice of staffing patterns are possible that range from assigning total responsibility to a staff member to dividing responsibilities among a team. Consider the following possible team members:

- **Counselor-based placement.** In this approach, counselors have total responsibility for placement. The rationale is that placement is a natural extension of other counseling duties. The approach assumes the counselor has knowledge of the student's job capabilities as well as the demands of the job. Counselors need to be adept at career assessment and planning and familiar with procedures for referring students to community agencies.
- **Employment specialists.** This approach involves recruiting a staff person from the "outside," perhaps from a public employment service office or local business. The person must be familiar with the local job

market, employers, and hiring practices. Usually, schools that hire specialists divide the placement duties so that counselors focus on educational placement and employment specialists on job placement. Unfortunately, this division is not always clear cut, particularly when a student needs both kinds of assistance. Also counselors may lack in-depth occupational information, and employment specialists may be generally unfamiliar with adolescent career development patterns.

- *School-employment service teams.* One way to overcome budget limitations and still acquire expertise in job placement is to work with the local public employment service. The school designates a placement team that might include a counselor, a vocational education coordinator or teacher, and a representative from the employment service. The success of this approach, obviously, depends on the degree of cooperation of the employment service.
- *Faculty-based placement.* Faculty always have been involved in job placement and undoubtedly will continue to be, regardless of any formal placement program. This is particularly true in vocational programs where teachers and curriculum coordinators locate cooperative training opportunities in the community. Normally cooperative education is not viewed as a placement system but as a parallel system to be considered when planning a more formal program.

Staff functions. If you have a large student body and a budget adequate to support a full-service program, the following specialists would comprise a complete team. The following list highlights three positions and their key roles:

- *Coordinator*

- Develops and implements a plan for placement services
- Organizes and directs the activities of an advisory committee

- Develops and conducts placement needs surveys
- Identifies available resources
- Manages the placement resource center
- Supervises staff and assigns staff responsibilities
- Coordinates staff development or inservice programs
- Coordinates the collection and dissemination of labor market information
- Identifies community organizations for resource and support purposes
- Coordinates the collection and interpretation of evaluative data and recommends program changes
- Represents the school on placement-related community groups

- *Counselor*

- Develops a placement plan for each student
- Refers students to sources of labor market information
- Provides placement-related assistance
- Consults with parents or guardians as necessary
- Assesses students' progress on a regular basis

- *Specialist*

- Gathers data on each student he or she is trying to place
- Coordinates instruction in preemployment skill development

- Collects information on local and national trends and disseminates it to other staff
- Maintains close contact with business, industry, and labor resources to promote student placement
- Obtains job descriptions for available positions
- Develops special programs or opportunities for special needs students
- Maintains current data on employers as well as students who are eligible for placement services
- Assists with follow-up studies and evaluation of co-op programs
- Provides referral services for early school leavers

Develop a Public Relations Program

Public relations activities intended to inform others of your efforts and thus attract their support should reach parents, employers, and the community at large. The following approaches might be considered:

- *Written materials*

- Brochures.* If you develop only one printed piece, this probably should be it.

Highlight your services and their benefits for students and employers.

- Newsletters.* A short newsletter on placement activities and successes is effective. Encourage student input.
- News releases.* Your local newspaper may welcome articles on job fairs, as well as on individual student achievement.
- Letters.* Write to parents about the program. Encourage their input and participation.
- Bulletin board displays.* Libraries and shopping malls are particularly good places for such materials.

- *Other activities*

- Presentations.* Business conferences and meetings of local service clubs are a good place to start.
- Television and radio public affairs shows.* Obviously, these can attract broad audiences.
- Open houses.* Conduct these periodically.

Implementing a Placement Program

The overall goal of a placement program is to assist students in making school and work transitions. To this end, a variety of methods can be employed to implement an effective program. Both group and individual methods can be used in formal job search programs, informal job search programs, and individual job development programs. To be most effective, placement staff should carefully consider the needs of the students and local employers in selecting methods and program types. A combination of approaches appears to be most beneficial.

Group Methods

In the context of job placement services, group methods have a number of advantages. They often are more cost effective because several students are provided service simultaneously. This approach obviously frees other staff for other responsibilities. Students also benefit. Peer interaction can be very effective in helping students learn that other persons have similar problems. Also, students may be more receptive to suggestions from peers than from authority

figures. Some of the group methods listed below also can be adapted for use with individuals.

Lectures. Lectures involve a minimal amount of group interaction. The advantages are that much information can be given to many people quickly; lectures are inexpensive in terms of the student-teacher ratio; and an excellent presentation can be inspirational. Lectures can be very effective when used as a part of a larger program that employs a variety of methods. On the other hand, some of the obvious drawbacks are that the recipient is in a passive role, with the burden solely on the instructor; the content may not be suited to each student's individual needs; and there too often is little opportunity for feedback.

Group discussion. The purposes of a group session generally are determined by the leader, who keeps the discussion on target. Group discussions often can be very useful in addressing problems faced by the students in their job search. Students can use each other's insights to shape their own thinking. Discussion is an excellent way to generate peer support.

Training groups (T groups) or sensitivity training. Training groups differ from group discussions in that they typically focus on some dimension of interpersonal relations. The facilitator helps the group members to evaluate themselves and others critically while focusing on the present. The goal of the experience is to see oneself as seen by others, using conflict as a vehicle for accomplishing this. The T group can be an effective technique for increasing sensitivity, improving the capacity for open communication, and increasing flexibility in role behavior. It should be noted, however, that the effects of sensitivity training seem to fade quickly, and the transferability of what is learned through this technique to the work environment has not been determined. Another drawback is that it takes special training to be an effective T group facilitator.

Role playing. Role playing can be very effective in a variety of settings. Problems may be provided by the leader, presented through case studies or open-ended audiovisual vignettes, or suggested by the participants. The technique can be used for improving communi-

cation skills, increasing self-awareness, teaching appropriate job language and behavior, reducing prejudice, and changing work attitudes. It also can be used effectively in practicing job interviews. Students can assume the role of applicants and/or employers. They assess each other's behavior and provide critical feedback and encouragement.

Gaming techniques. Although games are more frequently used in career development to improve goal-setting and decision-making skills than in job search, they can be used to develop awareness of business environments for placement purposes. Gaming is an effective technique for some students, because the element of fun is highly motivational. In most games, two or more students are each given information about a hypothetical situation. Each strives to win the game and maximize his or her returns. Many suitable games are available commercially, for example, "The Job Game" (Employment Training Corporation) and "Life Career Game" (Western Publishing Company).

Simulation. Simulations can be developed to help students learn the importance of worker interrelationships by carrying out interrelated tasks. Students assume roles in a hypothetical situation. For some, this is an excellent motivational technique because of the participatory element and the interesting situations that can be created. Simulations should be flexible, so that different numbers of roles can be used or roles can be combined in different ways. Simulations generally are long and more involved than role playing. Commercially available simulations can be used such as "Adventure—Lifelong Learning Simulation" (Abt Publishing Company) and "Project Seek" (The National Center for Research in Vocational Education). Simulations can also be developed locally to meet specific student needs or to address specific attributes of the local labor market.

Case studies. Using case studies, students work individually or in teams to try to resolve the problems that are posed. Members of the group share their ideas and discuss alternative solutions. This technique may be most appropriate for developing job search skills, improving work habits, and identifying problems of interpersonal relations and response to supervision.

Audiovisuals. Films, filmstrips, slides, tape recordings, videotapes, and closed circuit television can be used in providing job search assistance. These materials have a number of advantages. They are versatile and can be used in different settings with groups of any size. If kept in stock, they can be used with little preparation and can be chosen to fulfill a variety of purposes. Their use requires a minimum of staff time. The disadvantages are that the learner, more often than not, is placed in a passive role, and that the materials may not be strictly relevant to each student's needs. However, discussions can help focus the content on specific problems and involve the students more actively in interpreting the content.

Individual Methods

Individual assistance, in the form of counseling or other services, has the advantage that it can be tailored to students' needs. The content can be individualized and services provided at the most appropriate time for each student. The techniques for providing such assistance are described in the following four paragraphs. Individual assistance should be considered for every program.

Counseling. Individual counseling is provided to help students cope with school, work, and personal adjustment problems. The focus of such counseling usually is to help students develop the coping skills to handle future problems without assistance. It is obviously important that counseling be provided at the first sign of a potential adjustment problem. In many

cases, this makes it possible to avert a problem. Although individual counseling usually is considered an expensive technique in terms of counselor-student ratio, it frequently is more effective than group methods in resolving problems relatively quickly.

Dialogue with employers. Ongoing dialogue with students' employers is a good source of information about job adjustment problems as well as a good way to develop new job opportunities. In this way, placement personnel can be alert to potential openings and keep employers apprised of new students ready for placement.

Modeling. In modeling, the student observes a person (model) performing a task, and then attempts to duplicate it. The task is repeated until the student can perform it successfully. Correct performance is usually rewarded. This technique may be appropriate for learning interviewing skills, proper use of language, deportment on the job, and response to supervision. Its effectiveness is enhanced if the model is someone who is viewed by the student as being highly competent and with whom the student can relate easily.

Reading lists and printed materials. Placement personnel can provide reading materials or lists of such materials, from which the student learns job search strategies and appropriate behavior patterns. For materials to be effective, the reading level must be appropriate for the student and the content interesting. These materials are best used to supplement other methods and to provide information to students who cannot participate in other training.

Placement Program Structure

The methods described in the previous section can be incorporated into formal job development programs—or a combination of these programs and activities can be offered.

Formal Job Search Programs

Formal job search programs generally combine structured group activities and individualized job search activities. Although pro-

grams vary in length and content, some general trends can be noted. Many programs begin with structured group activities. These activities help students learn to use information resources, develop interviewing skills, identify potential problem areas in their job search, learn how to contact employers, develop resumes, and learn how to keep records of their job search.

The following types of services are often included in formal job search programs:

- Students are provided with and taught how to use information about potential employers through newspaper classified ads; employment service listings; telephone directories; and agency, association, and industrial listings.
- Students are taught to develop their own job opportunities by pursuing leads obtained from friends and family and by using available printed information. Students learn such techniques as calling employers to inquire about openings, asking for an interview, and asking to be considered for future openings.
- Telephone facilities are provided so that students can contact prospective employers. Clerical services such as typing and photocopying also are provided for individuals preparing applications and resumes.
- Students receive training in and are provided with opportunities to practice telephone and interviewing skills.
- Students are taught how to prepare resumes, letters of inquiry, and application forms.
- Students learn about the impressions they make on others. Activities are developed which focus on appropriate appearance, deportment, and personal interaction skills.
- Students learn how to develop a record-keeping system with which they can monitor their job inquiries, interviews, employer contacts, and the outcome of each contact. Students are assisted in using the system to make follow-up contacts, evaluate their success, and assume responsibilities for their search activities.
- Students learn to involve their families and peers in their job search in order to receive emotional support, job leads, transportation, and the like.
- Students learn to use a "buddy system" that pairs individuals with similar goals.

The purpose is to share the work—and successes—of the search.

Formal group activities can last from a few hours to several weeks of intensive instruction. A meeting of a few hours per week over several weeks allows students time between meetings to complete assignments (such as writing resumes) and provides time for consulting with individual students.

The formal activities usually are followed by actual job search, which is closely monitored by the staff. In this aspect of the program, each student usually works closely with a staff member. Other approaches, such as the "buddy system," may be used. In the group sessions, problems encountered by the students are discussed and potential solutions explored. Continuing the group discussions during job search is particularly effective with students who need additional support.

Exhibits 2-7 outline a formal job search program. The program combines formal job search training with supervised informal job search assistance. The sessions can meet once a week for two or three hours. The first five sessions utilize structured group activities. Suggested forms and activities are provided in the additional exhibits. Session six establishes an ongoing small group discussion that can be continued throughout the student's job search to provide needed support.

Informal Job Search Activities

Informal job search activities are a major means for obtaining employment. These activities can be offered either independently or as part of a formal job search program. An informal program offered as the only means of job search works best with highly motivated students who possess some job search skills. This approach teaches networking skills and makes facilities available so that students can conduct their own search. Some of the facilities include telephone, directories, clerical services, duplicating, and occupational information references. Time can be built into the student's schedule for use of the facilities or students can use the facilities at their own discretion. The facilities normally are moni-

EXHIBIT 2

FORMAL JOB SEARCH PROGRAM OUTLINE

Session	Content	Suggested Activities	Suggested Materials/Supplies/Facilities	Comments
1	<ul style="list-style-type: none"> • Introductions. Explanation of the purpose of the program. Ice breaking exercises. Student self-assessment 	Exhibit 3: Student Career Plans		
2	<ul style="list-style-type: none"> • Identify potential occupations and employers. • Identify strategies to contact employers. 	Exhibit 4: Occupation Analysis Form Exhibit 5: Goal Setting Exhibit 6: Employer Contact Record	<ul style="list-style-type: none"> • Occupational and labor market information • Telephone books • Resource persons 	Invite speaker from state job service or others knowledgeable about job search
3	<ul style="list-style-type: none"> • Develop resumes. Practice completing job applications Write cover letters 		<ul style="list-style-type: none"> • Materials on resume writing • Cover letters and job applications • Clerical and duplicating facilities for resumes 	Have students critique each other's resumes, cover letters, and job applications
4	<ul style="list-style-type: none"> • Develop and practice interviewing skills 	Exhibit 7: Sample Interview Questions	<ul style="list-style-type: none"> • Video tape equipment (or audio tape) 	Invite employer or personnel manager to discuss interviewing techniques. Have students in groups of 2 or 3 practice and critique interviewing skills
5	<ul style="list-style-type: none"> • Address problems in communication, appearance, and social skills. Begin individual job search 		<ul style="list-style-type: none"> • Video tape equipment (or audio tape) 	
6	<ul style="list-style-type: none"> • Continue individual job search Discuss problems encountered in job search in small groups or individual counseling. 		<ul style="list-style-type: none"> • Telephones and telephone books • Resources on employers • Supervised space for making calls 	Continue individual or group support for as long as necessary

EXHIBIT 3
STUDENT CAREER PLANS

Name _____

Complete all of the sections that are applicable.

A. Employment Plans (I want part-time, summer, or full-time work—circle one)

1. Type of job: _____

2. What is your training or experience for this job?

3. Do you know anyone who does this type of work?

☐ yes ☐ no

4. Are you willing to move outside the community?

☐ yes ☐ no Where? _____

5. What type of transportation do you have? _____

6. Do you know any employers who might hire you?

☐ yes ☐ no

7. What are your chances of finding this type of job?

☐ very good ☐ good ☐ not so good

8. What other jobs would you consider doing? _____

9. What barriers might prevent you from getting a job?

____ Not knowing what my interests and abilities are

____ Not knowing where to find a job

____ Difficulty filling out application blanks

____ Uncertainty about how to conduct myself in a job interview

____ Lack of transportation

____ Inappropriate personal appearance

____ Lack of experience or preparation for the job

____ Other _____

EXHIBIT 3—Continued

B. Educational Plans

____ Attend a four-year college (name): _____

____ Attend a two-year college (name): _____

____ Attend a vocational or technical school (name): _____

____ Other (name): _____

1. Have you applied to any of the above? ☐ yes ☐ no
2. Have you been accepted? ☐ yes ☐ no
3. Will you need financial help? ☐ yes ☐ maybe ☐ no
4. Have you applied for financial help? ☐ yes ☐ no
5. Do you plan to work while going to school? ☐ yes ☐ no
6. What type of job will this education lead to?

7. Which of the following will present problems?

- | | |
|---|--|
| ____ meeting expenses | ____ completing the application procedures |
| ____ adjusting to school life (making friends, finding a place to live, living in a city) | ____ choosing a school |
| ____ finding transportation | ____ choosing a major |
| ____ passing the entry tests | ____ gaining family support (my parents do not agree or will not support me) |
| ____ passing courses; studying; taking tests | ____ other: _____ |

C. Apprenticeship Programs

1. Name of trade _____
2. Name of union or company sponsoring the apprenticeship

3. What are the requirements for entry into the apprenticeship program?

EXHIBIT 3—Continued

4. Do you know anyone who does this type of work?

☐ yes ☐ no

5. What steps have you taken toward getting this apprenticeship? (taken the tests, name on waiting list, and so on)

6. What do you think your chances are of getting the apprenticeship?

☐ very good ☐ good ☐ not so good

D. Military Service

1. Branch _____

2. Have you talked to a recruiter? ☐ yes ☐ no

3. Have any of your friends or family members entered this branch of the service?

☐ yes ☐ no

4. Have you done anything to date about enlisting? _____

E. Marriage and Family Plans

1. Are you married or engaged?

2. Have you and your spouse or future spouse discussed your individual responsibilities?

☐ yes ☐ no

3. How have you prepared yourself for these responsibilities?

4. What will be your source of income? _____

EXHIBIT 4
OCCUPATION ANALYSIS FORM

1. Occupation: _____
2. Type of business or institution employing people in this occupation:

3. Are jobs of this kind available locally? _____
4. What are the job duties? _____

5. What are the entrance requirements?
Education or training: _____
Experience: _____
Apprenticeship: _____
On-the-job training: _____
Certificates or licenses: _____
Academic skills: _____
Tools and equipment: _____
6. What is the physical environment? _____

7. What are the pay and benefits?
Starting pay: _____
Payment arrangements (salary, hourly, commission, etc.): _____
Benefits: _____
8. What is a typical work schedule? _____
9. What is the employment outlook?
Local availability: _____
Increasing, steady, or decreasing demand: _____
Possibilities for advancement: _____

EXHIBIT 5

GOAL SETTING

1. **State your goal** as specifically as possible (for example, the specific job you want or the specific school you want to enter).
2. **Identify all the barriers** that might keep you from reaching your goal (for example, lack of transportation, not enough experience).
3. **Identify activities** you can do to minimize or eliminate the barriers.
4. **Identify the resources** you need to carry out your plans (for example, financial assistance to attend school, co-signer for a loan to buy a car).
5. **State a specific date** by which each activity will be completed.

GOAL: _____

Barrier	Activity	Resources	Date

EXHIBIT 6
EMPLOYER CONTACT RECORD

Organization _____

Address _____

Telephone _____

Person contacted _____

Title _____

Date contacted _____ by: Phone _____ Letter _____ In person _____

Notes:

Date contacted _____ by: Phone _____ Letter _____ In person _____

Notes:

Date contacted _____ by: Phone _____ Letter _____ In person _____

Notes

EXHIBIT 7

SAMPLE INTERVIEW QUESTIONS

You will probably be asked a number of the following questions:

How did you find out about this position?

What do you know about our company?

What position are you applying for?

What are your strong points?

What are your weak points?

Why should I hire you?

What can you do for our company?

Why do you want to work for this company?

How would you handle a problem such as . . . ?

What is your main goal in life?

What are your long-term plans?

What do you plan to be doing 10 years from now?

What are your leisure time activities?

How would you describe yourself to me in one word?

What does working mean to you?

Can you fit in?

How are you creative?

What have you done to prove that you are a good worker?

What are your qualifications for this job?

What specific skills do you have that relate to this job?

Can you accept criticism?

Can you work under close supervision?

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EXHIBIT 7—*Continued*

How do you handle difficult situations?

Are you willing to follow orders even if you do not agree?

Can you express yourself?

Do you have good judgement?

Can you represent this company in the manner we expect?

If we hire you, how long do you plan to stay?

What is your experience?

Are you willing to relocate?

Why do you think you would like this particular type of job?

Are you looking for a permanent or temporary job?

Do you have references?

What hours are you willing to work?

Do you have any medical problems?

What jobs have you enjoyed the most? the least? why?

What are your own special abilities?

How do you feel about overtime work?

tored by a staff member who assists students as needed. An informal approach also can work well with open-ended peer support groups. Students use these groups to discuss problems, share information, and give and receive support.

Individual Job Development

Job development, broadly defined, means working with employers to develop job opportunities. In general, it focuses on redistributing existing job opportunities and redefining entry requirements to permit wider access to jobs. Some of the major job development goals are as follows:

- To identify barriers preventing students from getting a job
- To create new jobs by negotiating with employers
- To supplement placement activities with counseling and other services to make students more job-ready
- To use community resources to increase employability (for example, to arrange needed transportation)

Job development is primarily a challenge in human relations that involves a concerted effort to convince a prospective employer to consider the job candidate only on his or her ability to do the job rather than on such unrelated criteria as race, country of origin, or physical handicap. Three steps are normally involved: preparing to contact potential employers, making effective contacts, and working with employers to expand job options.

- *Prepare to contact potential employers.* Some tasks to consider are—

- select job developers on your staff. Interpersonal skills, commitment, and (ideally) prior experience are important selection criteria. Agree on specific areas of responsibility for each staff person.

- develop procedures for contacting employers. Although surveys are very

useful, job development eventually comes down to personal contacts. In a sense, you have to "sell" your students to an employer.

- identify employers. It is a good idea to prioritize employers by the potential match between their needs and your students' skills.

- learn about the employer. Before contacting an employer, find out as much as possible about the size, growth potential, and stability of the company.

- contact employers by mail. This step is preliminary to a personal meeting. Explain your intent to follow up in person.

- plan a public relations effort. You should attempt to reach the community with word of what your graduates have to offer.

- *Make effective contacts.* Some points to keep in mind are—

- approach small and large companies differently. Small companies tend to make hiring decisions more quickly. They account for a large share of new jobs and often offer strong support for inexperienced or disadvantaged workers. However, they pay lower wages, have rapidly fluctuating labor needs, and are more likely to need workers with job-specific skills, since they are often unable to offer extensive on-the-job training. Larger companies normally provide more training and generally are more open to participation in state or federal employment and training programs.

- provide information to employers about your program. Explain enough about your graduates to attract their interest, emphasizing such features as your career planning program, basic skills development, and work experience programs. If your school follows a competency-based vocational training program, indicate the competencies

included, levels attained, and availability of records.

- obtain information about the employer's job needs. To supplement what you already know, find out about job requirements, pay ranges, training, turnover rate, projected openings, and plans for expansion.
- seek the employer's commitment to work with your program. Allowing for employer input into your programs often builds a sense of identity with your students and increases the likelihood of your graduates being hired.

- *Work with employers to expand job options.* Some suggestions to consider are—

- redefine job entry qualifications. Often employers set standards for entry that do not correspond to job demands. They may require previous experience when, in fact, the actual tasks can be learned quickly. These inappropriate qualifying standards limit the potential supply of workers. You should, therefore, attempt to demonstrate to employers why these standards do not seem applicable. If employers still are reluctant to alter these requirements, encourage them at least to interview a particular student, emphasizing the candidate's strengths for the job. Remind employers that you are only requesting an interview; the choice to hire obviously is theirs.
- modify screening procedures. Sometimes students who have the necessary qualifications are eliminated for jobs because of the screening procedures used. For example, most employers use interviews even for jobs that do not require verbal skills. In fact, interviews measure a candidate's ability to present himself or herself verbally rather than the ability to do the job. Although you should help your students with interviewing techniques, some still may have difficulties. With the student's permission, you may be able to meet with the employer before the interview to explain

any particular circumstances that might affect the interview.

- restructure working conditions. Sometimes what appears to be a wide discrepancy between the job demands and the candidate's abilities can be overcome by reshaping the job environment. Job modification requires you to be knowledgeable about all aspects of a particular job, including tasks performed, training procedures, physical demands, and social environment. This kind of analysis, together with a thorough knowledge of the student's abilities and limitations, will help suggest ways to restructure a job

Job Development for Special Needs Groups

Employer's concerns about hiring special needs students will affect your efforts significantly. Consider, therefore, the following concerns:

- *economic concerns.* Some employers believe that hiring special needs students will be an economic liability. In fact, studies show that disabled persons perform at average or above-average levels and that insurance rates do not increase.
- *safety.* Disabled persons often are considered accident prone. Actually, they have average or below-average absenteeism and accident rates.
- *job redesign.* Employers may view this approach as too expensive and may not understand the possibilities. You will need to help with this intervention in ways that have been suggested above.

Student Orientation

All students need to learn about the placement services long before their final school year. You will need to plan orientation activities that start in the freshman year and increase in intensity. Student handbooks, placement service brochures, and assembly programs all have

been found useful. Having recent graduates talk about how they used the placement services also is effective.

One way to make students aware of employment opportunities is a career day or fair. Try to get as many employers as possible to staff booths or give talks on job possibilities. Also, provide teachers with ideas on how to work with students ahead of time to maximize the effect of the program. For example, teachers can assign various tasks to their classes and require follow-up reports. A career day or fair can become an annual event. With added door prizes and refreshments, it often is an enjoyable change of pace and can be a very informative first step in career planning.

Support Services

Support services are those special services that help students overcome unusual barriers to employment. In most cases, the school placement program does not provide these services. Your particular challenge is to be aware of the barriers and know how to make appropriate referrals. No matter how skilled a student is or how effective the placement program is, a variety of problems can occur that make it difficult for some students to get—or keep—a job. School counselors should take the lead in this area. A detailed list of potential problem areas requiring support services and potential service providers is included in the resource guide on following students into the world of work.

Typically, administrators, instructors, and counselors draw upon support services in the areas of health care, dependent care, transportation, housing, rehabilitation, vocational

assessment, child and family services, information, training, drug and other substance abuse rehabilitation, interpretation, financial planning, and of course, job placement and follow-through. Pritz (1983, p. 6) describes several specific placement objectives:

- Match students to job openings that have been solicited.
- Mediate or act as a broker between employers and students.
- Assist students in finding and following job leads.
- Act as an advocate in meeting the unique needs of individual students.
- Increase students' chances for obtaining jobs by improving their approach to employers.
- Ensure that students learn sufficient skills to get and keep a job.
- Direct students to job openings that correspond with their skills, qualifications, and interests.
- Give students updated, realistic information about the job market for their occupational field.
- Provide continued and consistent support for student growth in job search skills.

For additional suggestions about support services, see Bhaerman, Belcher, and Merz's *A Helping Hand: A Guide to Customized Support Services for Special Populations* (1986).

Suggestions from Research

A recent study at the National Center for Research in Vocational Education (McKinney et al 1984) highlighted a number of factors that produce the highest rates of job placement in vocational programs. The highest rates exist in schools with the following characteristics.

- All staff understand and are committed to the realization that the *primary purpose of the educational program is the placement of students in work related to their training.*
- A *high level of staff enthusiasm* is evident for job placement as an integral part of the school program.
- *Teachers believe they have great responsibility for placing students.*
- *Teachers have regular contact with employers* regarding job placement.
- *The job placement office includes teachers* in job-placement activities.
- Frequent use is made of *needs assessment surveys* for planning and evaluating programs.
- *The curriculum is oriented to employers' needs.*
- *The racial balance of the school staff resembles that of the community served.*
- *Students participate* in youth organizations.

Evaluating Your Placement Program

The goal of school-based placement, to repeat, is to help each student make a smooth transition from school to work. Since no one can force a student to obtain a job, evaluation of this aspect of the program's success is meaningful primarily at an individual level.

In most cases, success is measured in terms of numbers and percentage of applicants placed. However, this fails to take into account longevity of placement or the relationship of a placement to a student's career goals. The following list presents a number of key factors to consider in addressing a placement program:

- **Staff support**

- The administration provides leadership and an atmosphere in which the placement service can function.

- The administration provides resources to carry out the relevant policies.

- Cooperation exists among the placement staff.

- Teachers assist by contributing to cumulative records, referring students, and helping students acquire occupational information.

- Support is provided that enables the placement service to be an integral part of the on-going program.

- Teachers provide classroom activities that teach students job-seeking skills.

- *Organization*

- The placement service operates with clear goals and objectives.
- The service allows for an appropriate specialist-student ratio.
- Arrangements ensure that specialists have time to perform their services.
- Students are oriented to the program and how to use the services.
- The service provides students with a variety of preemployment skill development activities.
- The service aids in staff inservice training and provides appropriate resources.

- *Specialists' activities*

- Scheduled office hours are flexible enough to meet students' needs.
- Specialists maintain contact with employers and actively seek job opportunities for students.
- Specialists maintain close contact with colleges and universities.
- Specialists seek to develop jobs where none existed.
- Specialists visit students at their employment sites.
- Specialists discuss career or educational planning with parents, to the extent possible.
- Specialists cooperate with placement-related and special-needs referral agencies.
- Specialists work with vocational teachers to develop job-related training sites.
- Specialists discuss with students the duties, requirements, and opportunities of specific jobs.

- Specialists provide educational placement services for students.

- Specialists maintain accurate follow-up records.

- *Record keeping*

- Individual inventory records are easily accessible.
- Individual inventory information—both adequate and current—is available
- Records are maintained on the number of students who registered for placement and their current status.
- Records are maintained on the number of students placed and jobs in which they are placed.
- Records are maintained of areas in which students experienced difficulty in being placed.
- Records are maintained concerning use of placement materials and evaluations of their appropriateness.
- Records are kept up to date, usable, and orderly.
- Arrangements are made to control the use of confidential information.

- *Information services*

- Publications providing up-to-date occupational and educational information are available.
- Information is easily accessible to students.
- New informational publications are constantly obtained.

- *Physical facilities*

- The placement office is easily accessible.

—Conveniently located display space is provided for placement information

• *Accomplishments*

—The placement service has reduced the number of dropouts.

—As needs have been identified through placement counseling, the curriculum has been revised accordingly.

—Evidence exists that the placement service has helped students make realistic career choices

—There is a growing demand for increased placement services.

REFERENCES

- Bhaerman, Robert D.; Belcher, James O.; and Merz, Harold E. *A Helping Hand: A Guide to Customized Support Services for Special Populations*. Bloomington, IL: Meridian Education Corporation, 1986.
- McKinney, Floyd L. et al. *Increasing Job Placement Rates in Vocational Programs: Secondary and Postsecondary*. Research and Development Series No. 245. Columbus: National Center for Research in Vocational Education, The Ohio State University, 1984.
- Pritz, Sandra. *Job Placement in Employment and Training Programs: An Action Planning Guidebook*. Research and Development Series No. 218. Columbus: National Center for Research in Vocational Education, The Ohio State University, 1983.

FOLLOWING STUDENTS INTO THE WORLD OF WORK

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Introduction

Following Students into the World of Work is a planning resource designed to assist administrators, teachers, counselors, and other school staff in further developing follow-up studies and follow-through services. It presents an overview of both topics, specific steps in planning follow-up studies, and ways of developing and delivering follow-through services.

Although this document represents a synthesis of numerous publications on the topics, it is not a comprehensive analysis of every aspect of follow-up and follow-through. The intent is to provide a means by which users can further design programs that meet the transitional needs of students.

What Are the Purposes of Follow-Up Studies?

The term *follow-up* implies the collection of data about something that has already taken place. In a follow-up study conducted by a school or college, students usually are asked to reflect on how a particular program either prepared or failed to prepare them for work or subsequent education.

The concept may be better understood when placed in a broader context. Follow-up is usually considered part of a comprehensive evaluation process. As all other evaluation techniques, follow-up studies are designed to provide information for decision making. Therefore, a major goal of evaluation in general and follow-up studies in particular is to improve the program being examined.

The decision to conduct a follow-up study normally evolves from the objectives of the total program evaluation effort. Once the objectives of this effort have been determined, the next step is to identify the kinds of information needed to answer the evaluation questions. Several techniques should be used to collect the information needed, that is, follow-up studies should not be viewed as the only method of evaluation.

The need to conduct follow-up studies normally results from the many demands and responsibilities placed on the school. In order to meet these demands and responsibilities, schools must be able to document the results of their efforts. A comprehensive follow-up can help schools meet these pressures, as well as improve their programs, services, and relations with the community. Follow-up studies can meet these needs by fulfilling the following purposes:

Accountability

This purpose of follow-up provides evidence that current services rendered to students are yielding results in relation to the established objectives and money spent. It allows schools—

- to comply with legislative specifications for reporting,
- to provide support for the school in response to pressures to divert resources elsewhere,

- to advocate that additional funding would be justified, and
- to provide evidence that the school is meeting community, state, and federal needs.

Planning

This purpose of follow-up contributes to administrators' ability to plan meaningfully on the basis of information. It allows schools—

- to contribute to decisions about expanding, deleting, or revising programs;
- to determine the cost-effectiveness of programs; and
- to determine the status and occupational mobility of former students.

Program Improvement

This purpose of follow-up identifies program strengths and weaknesses and solicits suggestions for improvement. It allows schools—

- to evaluate the effectiveness of services by measuring participants' ability to perform satisfactorily on the job,

- to obtain feedback from students after they have been in the work world,
- to record students' observations about strengths and weaknesses of services from their vantage point, and
- to obtain employer and community input for use in setting and/or resetting priorities

Labor Market Information

This purpose of follow-up supplements other sources of labor market information used in planning and program improvement. It allows schools—

- to obtain employer input for use in developing students' understanding of job requirements;
- to maintain information files on employers regarding levels and types of employment, hiring and retention practices, and needs and expectations;
- to learn how new technology is affecting the job market; and
- to identify occupational trends and determine opportunities for job advancement.

What Are the Purposes of Follow-Through Services?

Follow-through services are those services offered by a school or college to help ensure that their students are successful in subsequent endeavors. Follow-through programs normally have several features.

- They are a logical extension of the curriculum and, as much as possible, are an integral part of that curriculum.
- They meet a variety of needs that current and former students are likely to encounter.
- They employ a variety of delivery methods.

- They are based, as much as possible, on data gathered through follow-up studies.
- They provide for continuity of service in order to optimize service consistency.

A number of benefits accrue for the school, community, and students through the use of an effective follow-through program. The nature of those benefits varies according to the type of school, differences among the students, and community differences. Some of the major purposes—and benefits—are as follows:

- Continued job placement assistance helps jobless students who do not find employ-

ment or who become employed and then quit or lose their jobs. These services are useful in helping students identify job opportunities and instructing them on job seeking skills

- Follow-through services help students obtain further education and training
- Follow-through services help students cope with stressful situations on the job.
- Follow-through services provide valuable feedback for program improvement. Staff members who provide these services are in a unique position to observe the outcomes of the institution's programs
- Follow-through services improve the credibility of the institution. Since these services demonstrate a commitment to help

ing students become established and productive, this kind of commitment strengthens the image of the institution as contributing to the well-being of the students, workers, employers, and community.

Campbell, Ho, King-Fitch, and Shellberg (1981) conducted a study of follow-through services that, although focusing on employment and training, is applicable to schools. The researchers note a number of barriers and facilitations to implementing effective follow-through services. For example, some major barriers are the lack of reward for the institution offering such services and the lack of support for follow-through among some staff. Factors that facilitate the development of such services are the positive attitudes of some staff toward establishing the services and the existence of a mechanism on which to build a program.

Planning for Follow-Up Studies

Steps in the Planning Process

In order to ensure effective management of a follow-up study, a well-thought out plan obviously must be developed with input coming from teachers, counselors, administrators, students, the board, advisory committees, placement specialists, and co-op coordinators.

The following list in the form of a planning matrix (figure 1) illustrates the major steps in planning and conducting a follow-up study. Each of the steps involves identifying needed resources, projected costs, persons responsible, projected completion date, and method of evaluating.

Steps	Resources Needed	Projected Costs	Persons Responsible	Date to be Completed	Evaluation
Organize a planning committee.					
Identify objectives.					
Determine the target population.					
Determine timing and frequency.					
Determine data collection methods.					
Determine persons responsible, costs, and deadline dates.					
Develop an orientation program.					
Develop data storage procedures.					
Determine method for analyzing data.					
Determine format for reporting results.					

Figure 1. Planning matrix

Organize a Planning Committee

Although effective follow-up studies result from a total school effort, representatives from both the school *and* community need to be involved in planning, organizing, and conducting the studies. The committee normally consists of people who have the responsibility for conducting follow-up as well as those who use the results. The committee's role basically is to develop and prioritize a list of information needs. In addition, it monitors follow-up activities in order to ensure that the information gained serves the purposes identified. Its members obviously must be chosen with care to represent the various parties interested in the school, its growth and relationship to the community.

Identify Objectives

The objectives of follow-up studies are derived primarily from the school's overall goals. Although the latter's goals normally are stated in broad terms, the objectives of a follow-up study are normally quite specific, for example, to determine placement rate, job retention rate, employer and/or student satisfaction, career stability or progression among students, and retention of students in training, counseling, and other services (nonattrition).

Regardless of how a school's broad goals are stated, decisions need to be made regarding which particular dimensions are to be evaluated. These decisions result in defining the specific purposes of the follow-up study. Once these purposes have been decided, they can be written as the follow-up study goals. Since these are the basis of the design of follow-up strategies, it is important that they reflect the program needs as precisely as possible. For example, if planning is a purpose for conducting the follow-up, a major goal of the study would be to provide information that can assist you in making decisions on how to improve the school's efforts (that is, through expanding, altering, or eliminating some of your program through assistance in decision making, planning, and evaluation). From these objectives, more specific "question-oriented" ones are developed. For example:

- Identify reasons former students leave before completing the program.
- Identify on-the-job difficulties former students have experienced.
- Identify the types of work experiences former students have had.
- Determine the perceptions of former students regarding the adequacy of the training

Determine the Target Population to Be Studied

The objectives outlined for the study help the committee decide which populations are to be surveyed. A follow-up study usually involves gathering information on institution leavers. Follow-up also can be conducted with employers or other educational institutions to which students go. Follow-up of employers not only provides information on the effectiveness of the student's preparation for employment, but also helps develop linkages between the school and employers.

A decision needs to be made regarding whether follow-up information needs to be gathered on all students or on a sample. Sometimes data is required of all institution or program leavers. If a sample is to be used, decisions need to be made on the sample size and how it is to be selected. The size may be determined by reporting requirements. Also, the sample should be stratified so that various groups such as students in vocational, academic, or general programs; males and females; and racial and ethnic groups are represented. Another decision regarding the population is whether only graduates are to be surveyed or whether dropouts and transfer students are to be included.

Determine the Timing and Frequency

Follow-up studies can be conducted for all students who leave the institution or on selected groups (for example, every third year). Both short-term and long-term studies are useful. A

short-term study, however, does not allow you to follow the career paths of students and to make extensive program improvements based on the turns that students' careers make during a span of years. Long-term studies, conducted at predetermined intervals for each group of students being studied, can provide data about questions such as the following. What are the opportunities in the community for job advancement? How satisfied are former students with their jobs? What preparation was useful to students and what was not? In what areas did students need more preparation? In addition, such an approach allows you to secure work-related information from students who initially pursued further education.

The timing and frequency of follow-up studies will depend on your objectives. When it is important to have accurate information on students for the period immediately following their graduation or leaving, 30-, 60-, and 90-day studies are conducted.

Follow-up studies of 1, 3, and 5 years obviously may be much more useful. The initial study can provide the school with its first opportunity to get usable former student data. It can secure basic information about employment status and further education being pursued and can provide insights into the adequacy of the instructional program. Some typical questions asked are the following: Was your preparation for work or further schooling adequate? What problems did you face in the transition? What kinds of additional education or training do you need?

A 3-year follow-up is designed to provide additional information about students who have been working since leaving the institution. It also supplies the first job information for students who have been enrolled in junior, community, or technical colleges as well as information on patterns of work related with continued education and training. This survey usually asks former students to indicate any job or location changes; to evaluate the educational program, the guidance and counseling program, follow-up services, and placement service; and to designate any additional educational or training needs.

The 5-year study supplies the first job information about students who have been enrolled in 4-year educational institutions and those recently discharged from military service. It is undertaken to provide information on job histories, further education or training, and skills that have been identified as being most useful in further study or on the job. The study provides former students with an opportunity to reflect on their choices and to identify any major problems faced in their jobs.

Determine Responsibilities, Costs, and Deadlines

It is necessary to determine who is responsible for conducting the program, the cost of conducting studies, and the deadline dates. The following insights should be helpful.

Staff responsibility

Determining who will be responsible for conducting the various parts of the follow-up program is essential. Generally, the top administration will assign someone the prime responsibility for conducting the studies. This person may be a member of the guidance and counseling staff, a co-op coordinator, or another administrator. Others who are typically involved in organizing, planning, and conducting the studies include teachers, students, placement specialists, and the vocational advisory council/committees. Individuals and groups involved in the process are described in the following list:

- *School administration.* The administrator usually has the ultimate responsibility for coordinating the follow-up study and supervising others who have responsibility for planning and conducting the study. Other tasks normally include the following:
 - Approving all survey instruments
 - Interpreting data in meaningful ways for different groups (for example, staff, students, employers, and general public)
 - Implementing the findings

—Approving all costs incurred, for example,

-costs involved in the preparation and duplication of questionnaires,

-mailing costs,

-data processing costs,

-costs involved in interpreting data and writing reports,

-salaries of professional and clerical staff, and

-costs of all materials used.

—Disseminating the results

- *Teachers.* Teachers also may be involved in reviewing the objectives of the study, helping to determine the methods of obtaining data, determining the questions to ask, and helping to prepare questionnaires

Since they have daily contact with students, teachers are instrumental in developing positive student attitude toward follow-up studies. They can alert students to the fact that the school will be contacting them after they leave and can help students understand why such information is important. Moreover, former students are often more apt to respond to a questionnaire if it comes from an instructor they know and respect. Thus, teachers often are asked to sign or cosign the cover letter that accompanies the questionnaire.

- *Student committee.* Many schools are discovering that student involvement in planning and conducting follow-up is very rewarding for both the school and the students. Students can help to word questions so that they will be easily understood by and relevant to former students. Student involvement also is extremely valuable in pilot testing the questionnaires.
- *Advisory committees.* Advisory committee members are in an excellent position to help obtain feedback about former stu-

dents. In many cases, these people will be employers who can supply first-hand information. The support of committee members can help ensure that other employers will appreciate the value of the study and take the time to participate. Advisory committee members possess information and insights that can be useful in preparing and conducting follow-up studies; for example, they might engage in some of the following activities: providing suggestions for questionnaire forms, interviewing former students, reacting to data collected, communicating the findings to the public, and formulating recommendations for program changes based upon the findings.

- *Guidance and counseling staff and placement specialists.* Guidance and counseling staff and placement specialists are generally very interested in helping to plan studies, and many educational schools give them major responsibility for these activities. Their services are directly affected by opinions of former students, since the guidance, counseling, and placement functions are specifically designed to help the students prepare for work or further education. Guidance and counseling staff and placement specialists help select the groups to be surveyed, determine the type of data to be obtained and the methods of obtaining it, and help in constructing questionnaires. They ensure that questions concerning the effectiveness of the placement and guidance services are included in the design of the follow-up instrument. Since they usually are familiar with many former students, they are in an excellent position to develop cover letters that will be meaningful to the students to be surveyed
- *Co-op coordinators.* In some schools and colleges, the primary responsibility for conducting follow-up studies is delegated to coordinators of cooperative education programs. Co-op coordinators normally develop active cooperative relationships with area employers and are skilled in placing students and following up on those placement efforts to ensure they are successful. Hence, persons serving in these

roles are logical candidates to assume the responsibility for conducting follow-up studies in some schools. At the very least, they should be consulted during the planning and implementation processes.

Costs of Conducting Studies

Costs normally are divided into two categories: those associated with the time personnel will spend on the study and costs of purchasing supplies, printing, and mailing. The percentage of time a staff member will spend on the study should be determined in advance in order to help ensure that adequate time is devoted to the study as well as the regular duties of the staff member. Two dangers are present here. If only one or two staff people are assigned to conduct the study, they may find the task to be overwhelming, and this will keep them from adequately attending to their regular duties. On the other hand, if many people are given small tasks to do, the administrator of the study may find coordination very difficult. Meetings may be hard to schedule and the chance for lack of coordination resulting in disjointed operation of the study will be maximized.

The costs of conducting follow-up studies also are determined by the purpose of the study and sample size. Costs generally include printing questionnaires and cover letters, mailing expenses, data storage and analysis, and hiring consultants to train staff, as needed. Other costs include developing questionnaires, preparing public relations flyers, and preparing written reports.

Deadline Dates

You obviously need to establish specific deadlines for each step of the planning and implementation process. This may be the one

way of ensuring coordination and timely completion of the study. Since it is likely that the follow-up study will involve the cooperation of many people who also have regular duties, the staff involved needs to be informed of deadline dates in advance so that they may plan their schedules. Using a chart such as the one depicted in figure 1 will help the administrator organize the efforts of the staff.

Develop an Orientation Program

An orientation program is an excellent way to begin a follow-up study because it can be used for a number of purposes, namely:

- To inform other staff not involved in planning or implementing the purposes and procedure of the study
- To inform federal, state, or local agencies about the study
- To encourage the participation and cooperation of the community
- To collect baseline data on students who will later be the subjects of the follow-up study
- To acquaint students with the forms to be used so they will know what to expect
- To encourage students to participate by acquainting them with the benefits of completing and returning the questionnaires.

How the orientation program should be organized, who should present it, and what should be covered will depend on its purpose and the audience. Typically, several orientation programs should be developed, with each targeted for a specific audience.

Steps in Data Collection

In general, there are two methods of data collection: mail questionnaires and interviews. Many factors, however, affect the choice of data collection methods. The more important factors are the objectives of the study, the characteris-

tics of the population to be surveyed, budget and time allotted for the study, personnel involved in planning and conducting the study, the response rate desired, and the intended uses of the data.

The purposes for which the study is conducted obviously affect the choice of data collection methods. For example, if follow-up of all institution leavers is desired, personal or telephone interviews may not be practical. On the other hand, if in-depth information on complex issues (such as adjustment to work) is desired, personal or telephone interviews might prove more useful.

The population to be surveyed influences the choice of data collection methods. If the number is large or scattered over a wide geographical area, a mail survey may be the only practical approach. If the recipients are low-level readers or have other special considerations, personal or telephone interviews may be more appropriate.

Telephone or personal interviews can be more expensive in terms of personnel time than mail surveys. Mail surveys, on the other hand, may be more expensive in terms of printing, initial mailing, and follow-up mailing. The cost must be weighed in terms of the resources and budget allotted for the study. Both collection methods can be time consuming. The time constraints for planning, conducting, and reporting may well dictate how thorough the study is. Mail surveys are time consuming in terms of preparing questionnaires, response time, and "tracking down" nonrespondents. Personal or telephone interviews, on the other hand, usually can be done only with a small number of students.

The expertise and other responsibilities of the staff designated to conduct the study also affects the selection of data collection methods. Interviews require empathy and sensitivity on the part of the interviewer. Procedures for designing questionnaires, tabulating, and analyzing data for mail surveys require a great deal of technical expertise.

The projected response rate required also affects data collection methods. Mail surveys can have a high nonresponse rate, thereby affecting the usefulness of the data obtained. Tracking down nonrespondents is often time consuming. Telephone or personal interviews can result in higher response rates but can also be time consuming. Regardless of the method of data collection, a good orientation program will

help to reduce the number of nonrespondents by increasing awareness of the importance of follow-up.

The uses for which the data is intended also affect data collection methods. Mail surveys can elicit responses that are more uniform and quantifiable. This data may be more useful for reporting statistics regarding employment rates and the like. Interviews tend to be less uniform because of differences among interviewers and the way students respond. However, the data collected can be more in-depth. This type of data collection may be more useful for reporting adjustment problems and attitudes.

Getting Ready to Collect the Data

Regardless of the method used, a number of issues should be kept in mind. Written instruments are necessary no matter which methods are used. They help to standardize the data collected and ensure that the objectives are met.

Each question should adhere closely to the objectives so that they serve at least one of the purposes of the study. Exhibit 1, Follow-Up Data/Questionnaire Worksheet, demonstrates the process of identifying questions based on objectives.

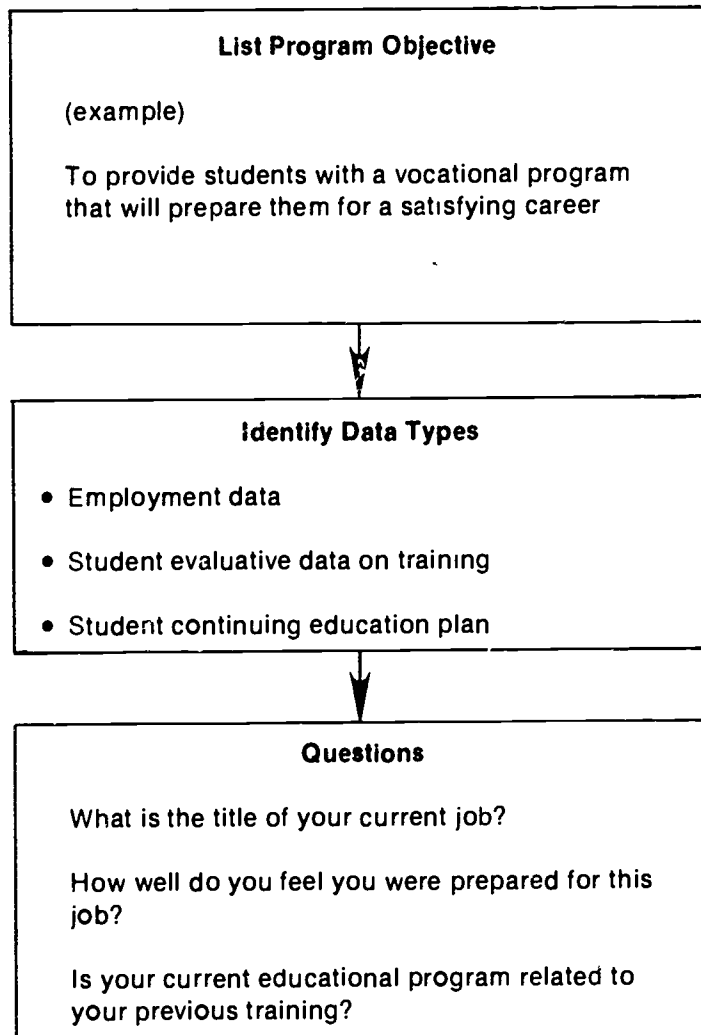
When requesting opinions about "satisfaction," be aware that responses will be influenced by the person's values, needs, and expectations. Although this type of data should not be used as a means of measuring program effectiveness, it can be used, for example, to indicate the need for follow-through services.

When constructing questions, look ahead to how the possible responses may be used. For a questionnaire administered by interview, indicate when a response should be clarified or probed. Decide which of the possible responses should be put into the categories identified. Sometimes this foresight will lead to restructuring questions in order to avoid problems later. Specificity can avoid confusion that might reduce the accuracy of the data.

Here are some topics to consider when contacting employers:

EXHIBIT 1

FOLLOW-UP DATA/QUESTIONNAIRE WORKSHEET



- Information about the respondent: title, business address
- Information about the business: type and function, location
- Information about employees: number, percentage by sex, age, minorities
- Expectations of employees: training, educational and other requirements, strengths and weaknesses
- Perceptions about the program: job performance of former participants, preparedness in specific areas, recommendations for improvement
- Potential cooperation: placements, on-the-job training, advisory committees

It is, of course, wise to pilot-test the follow-up instruments—and procedures—with a sample of respondents. For example, check for the following items:

- Clarity
- Form, layout, and length
- Ease of response
- Usefulness of responses
- Predictability of contact with those to be questioned
- Percentages of returns

Once the data collection method has been designed, the next step is to construct a master list of former students who will be contacted. This task is greatly simplified if students have been asked to fill out a card at the time they left school indicating an address where mail will usually reach them.

Exhibit 2, Standard Biographical Data form, can be used to collect baseline data. It can be completed by the students themselves prior to leaving school.

Conducting Mail Surveys

Mail surveys are one of the most common methods of data collection. This type of survey has a number of advantages and disadvantages.

Advantages

- The cost is relatively low.
- Large numbers of respondents can be reached.
- Respondents can answer at their own pace.
- Geographically dispersed respondents can be reached easily.
- All respondents receive exactly the same questions.
- Portions of the response may be made anonymous if desired.
- They can be used to gain information from both students and employers.
- Any personal antagonism towards interviewers which may lead to refusal to give desired information is avoided.

Disadvantages

- The rate of return may be low.
- The method is relatively impersonal.
- There is no opportunity to probe answers.
- The types and length of questions that can be asked are limited because of chances for misinterpretation.
- The method requires reading and writing.
- Uncertainty is introduced as to who completed the form.
- Because the questionnaire may be read entirely before response, questions asked

STANDARD BIOGRAPHICAL DATA

- SOURCE:** Adapted from Sears (1985).

later on the form may influence the answers to earlier questions.

- In most studies, the questionnaire must be relatively brief if a high rate of return is to be obtained.
- Up-to-date address lists of potential survey informants often are difficult to find.

Developing the Questionnaire

A number of important factors need to be kept in mind that will help ensure a questionnaire that is easy to read and complete, that will help improve the response rate, and that is easy to tabulate. Here are some items to keep in mind:

- Determine the optimum length of the questionnaire by balancing considerations of information needs against ease of administration and response. As a general rule, a questionnaire to be used in an interview can be longer than a mailed questionnaire without the respondent finding it difficult.
- Arrange items on the instruments for ease of response. For example, group questions with similar types of responses together (open-ended and closed-ended). Start with a series of questions likely to establish rapport with the respondent and sequence the remaining questions logically.
- Pay attention to format and appearance in designing instruments. For example, quality paper should be used, if possible, and the design should be attractive. Sufficient space to answer each question should be provided.
- Select the type of question structure best suited for the kind of information being elicited.
- Word questions to maximize clarity and to be concise. Express each item clearly, choose words that have precise meanings, and avoid complex or awkward word arrangements.
- Avoid asking for information that is already in the files.

- Avoid trivial questions.
- Make the suggested answers simple
- Be sure the items will be seen by the respondents as applying to a concrete situation.
- Refrain from asking questions of opinion unless opinion is what is specifically required.
- Avoid items that are too suggestive, that is, they should not lead a respondent to go beyond the facts but rather should induce her or him to provide the required information.
- Phrase questions to avoid the academically or socially acceptable responses. Make it possible for the respondent to answer truthfully without embarrassment.
- Avoid questions that may be checked with several responses when only one response is desired. Such items usually are difficult to tabulate and analyze.
- Whenever possible, word questions so that they can be answered by a check mark.
- Ask questions in such a way that they will relieve the respondent of as much complex thinking as possible. A popular technique is to reduce a complex question to a series of questions that are easier to answer.
- Avoid the use of words that are susceptible to different interpretations (for example, good or bad, rich or poor, laborer or capitalist).
- Include the name, title, and complete address of the person to whom the form should be returned.
- Precode questionnaires in order to determine response rate.
- Include the purpose of the study in an accompanying cover letter.

Writing items for a questionnaire involves identifying specific questions based on the

objectives of the study. The objectives to be measured should be identified precisely. When they have been, criterion questions based on those objectives can be written. These are specific questions that allow you to determine what information will be needed in order to measure whether the objective has been met. Specific items can then be constructed based on the criterion questions. Exhibit 3, A Process for Developing Follow-up Questionnaire Items, provides two examples. Exhibit 4 is an example of a closed-ended item questionnaire; Exhibit 5 depicts an open-ended item questionnaire.

Pilot Testing

It is always wise to pilot test the questionnaire to see if the directions and items are clear. Although frequently omitted, this step helps avoid both unnecessary mistakes and excessive time in analyzing data once it is returned. Current students are good individuals with whom to pretest your instrument.

Cover Letters

A cover letter helps explain the purpose of the questionnaire and encourages the students to respond. In some cases, it is helpful to have administrators, counselors, teachers, or community members sign the letter if their signatures will encourage students to respond. The letter should be attractive and, if possible, contain the institution's logo and be on quality paper. All of these factors help the student feel special and increase the likelihood of their completing the questionnaire.

Nonrespondents

Nonrespondents are persons who simply do not return the questionnaire. A 60 to 75 percent rate of return should be your goal, and this rate of return can be difficult to achieve through a mailed questionnaire.

Usually within 2 weeks after a second mailing, at least half of the remaining nonrespondents generally return completed questionnaires. Usually nonresponse is the result of forgetting about it rather than objection to the

process. For those who do not give immediate assurance of returning the questionnaire, it is a good idea to attempt to obtain their responses on the phone. However, in most schools, long distance calls to nonrespondents is not financially feasible. If this is the case, another reminder should be sent.

To summarize, a number of steps can be taken to increase the response rate of mail surveys. In addition to the items previously noted, the following points will help increase the response rate:

- Use short, uncomplicated instruments.
- Time the mailing to arrive in midweek.
- Provide a prepaid envelope.
- Place difficult questions last.
- Avoid personal information as much as possible.
- Send a newspaper clipping or publicity about the study.
- Offer to mail out the address list and a few words about classmates to all who respond.
- Write "Please forward" on survey instruments.
- Send self-addressed change of address cards to parents or guardians so they can provide a current address.

Conducting Interviews

Generally, the two ways of conducting interviews are in person and by telephone. There are several advantages, as well as disadvantages, to collecting follow-up data through the use of either interview process

Advantages

- Since interviews are conducted on a personal basis, their use allows the interviewer to ask questions requiring in-depth

EXHIBIT 3

A PROCESS FOR DEVELOPING FOLLOW-UP QUESTIONNAIRE ITEMS

Program Objective

To provide students with the job seeking skills needed to secure employment

Criterion Question

How well do former students feel their career guidance program prepared them to seek a job?

Questionnaire Items

1. How well did the career guidance program prepare you to complete job applications?

Very well ____ Satisfactorily ____ Inadequately ____

2. How would you describe your preparation for the job interview?

Excellent ____ Good ____ Fair ____ Poor ____

* * * * *

Program Objective

To provide disadvantaged students with an educational program that will result in their entering a satisfying career program

Criterion Question

How well do former vocational students feel their educational program prepared them for an occupation?

Questionnaire Items

1. Considering your occupational experiences since leaving school, how well do you feel your school prepared you for your career?

Superior ____

Poor ____

Good ____

Not at all ____

Average ____

2. How do you feel about your current job?

Very satisfied ____

Dissatisfied ____

Satisfied ____

Very dissatisfied ____

SOURCE: Adapted from Pritz (1983).

EXHIBIT 4

SAMPLE FOLLOW-UP SURVEY INSTRUMENT

What type of program were you enrolled?

- ☐ college preparatory ☐ co-op ☐ general ☐ vocational (specify) _____

How many years did you attend junior and high school before completing or leaving the program?

- ☐ 1 year ☐ 2 years ☐ 3 years ☐ 4 years ☐ 5 or more years

What are you currently doing?

- ☐ working full time (30 hours or more per week)
☐ working part time (fewer than 30 hours per week)
☐ unemployed, looking for work
☐ unemployed, not looking for work
☐ full-time homemaker
☐ in military
☐ other (specify) _____

In school (full- or part-time)

- ☐ apprentice-related program
☐ area vocational-technical school
☐ community junior college
☐ company school
☐ correspondence course
☐ military specialist school
☐ private business/commercial school
☐ university/4-year college
☐ other (specify) _____

If you are working part-time or full-time, please describe your duties. _____

Did you hold a job during your last year in school?

- ☐ yes—full time (30 hours or more per week) ☐ yes—part time (less than 30 hours per week) ☐ no

How do you feel about your high school experience?

- ☐ liked it very much ☐ liked it pretty well ☐ neither liked nor disliked it
☐ disliked it more than I liked it ☐ disliked it very much

EXHIBIT 4—Continued

SAMPLE FOLLOW-UP SURVEY INSTRUMENT (continued)

What part of your high school experience do you feel is most beneficial to you today? (Please rank from 1 to 5, 1 is the most beneficial and 5 is the least beneficial)

- ___ course work (specify courses) _____
- ___ clubs and social activities (specify) _____
- ___ sports (specify) _____
- ___ acquaintances
- ___ course counseling

How could the school program be improved?

(Please indicate your feelings by placing a check in the **yes** or **no** box.)

- | YES | NO | |
|--------------------------|--------------------------|--|
| <input type="checkbox"/> | <input type="checkbox"/> | Require fewer courses and offer more meaningful electives. |
| <input type="checkbox"/> | <input type="checkbox"/> | Offer more counseling services. |
| <input type="checkbox"/> | <input type="checkbox"/> | Provide more information on jobs. |
| <input type="checkbox"/> | <input type="checkbox"/> | Offer more courses. (specify) _____ |
| <input type="checkbox"/> | <input type="checkbox"/> | Provide more extracurricular activities. |
| <input type="checkbox"/> | <input type="checkbox"/> | Allow students the opportunity to know teachers better. |
| <input type="checkbox"/> | <input type="checkbox"/> | Enforce rules of conduct more strictly. |
| <input type="checkbox"/> | <input type="checkbox"/> | Offer students more freedom while in school. |
| <input type="checkbox"/> | <input type="checkbox"/> | Reduce class size. |
| <input type="checkbox"/> | <input type="checkbox"/> | Provide more co-op programs. |
| <input type="checkbox"/> | <input type="checkbox"/> | Require more homework. |
| <input type="checkbox"/> | <input type="checkbox"/> | Offer more specific training for a job. (specify) _____ |
| <input type="checkbox"/> | <input type="checkbox"/> | Reduce cost of activities fees and supplies. |
| <input type="checkbox"/> | <input type="checkbox"/> | Offer more assistance in finding employment. |

EXHIBIT 4—Continued

SAMPLE FOLLOW-UP SURVEY INSTRUMENT (continued)

Which teaching method seemed to be the best for you? Please rate each method:

1—very helpful 2—helpful 3—little or no help

1	2	3	
___	___	___	lectures
___	___	___	labs
___	___	___	movies
___	___	___	class or group discussions
___	___	___	slides, filmstrips, tapes
___	___	___	learning by doing (shops, P.E.)
___	___	___	on-the-job training
___	___	___	study guides or programmed instruction

Please indicate how much the following people helped you in planning your future while you were in high school. Please rate each method:

1—very helpful 2—helpful 3—little or no help

1	2	3	
___	___	___	parents, relatives, and other duties
___	___	___	counselors
___	___	___	occupational specialists
___	___	___	teachers
___	___	___	friends

Please list any additional suggestions you have for improving the educational program _____

SOURCES: Adapted from Pritz (1983), Sears (1985), and Franchak and Spirer (1978)

EXHIBIT 5

SAMPLE FOLLOW-UP MAIL QUESTIONNAIRE
WITH OPEN-ENDED ITEMS

5 Years after High School

Name _____

If married woman, give birth name _____

Present address _____

Address where mail will usually reach you (if different from above)

1. Check the items below that best describe your current status. (Check all that apply)

____ married
____ employed
____ student

____ in Armed Forces
____ other (explain)

2. Regardless of what you are involved in, show how you like it by checking one of the items below.

____ I really like it.
____ My likes balance my dislikes.
____ I don't like it, but will put up with it.
____ I hate it.

3. In the item above, why did you check the one you did? _____

4. What do you believe helps you succeed in what you are involved in?

5. What do you believe hinders you in what you are involved in?

6. What would you like to be doing in 5 years? _____

7. What would you like to be doing in 10 years? _____

EXHIBIT 5—Continued

8. If you are married, when were you married?

_____ month _____ year

How many children do you have? _____

Are you living with your spouse? _____ Yes _____ No

If not, are you _____ separated? _____ widowed? _____ divorced?

9. Judging from your experience, what could schools do to better prepare young people for marriage? _____

10. Show what you have been doing each year since you graduated:

198- _____

198- _____

198- _____

198- _____

198- _____

11. If you could live over again the last 5 years, would you do the same things? _____ Yes
_____ No What would you do differently? _____

12. Looking forward to the future, do you think things will work out well for you? _____ Yes _____ No Why? _____

13. If you are employed, check whether your employment is
_____ full time _____ part time

What do you do on the job? _____

What is the name and address of your employer?

14. Why did you choose your current job? _____

- 15 (Optional) What is your income?

When you began your job: \$ _____ per week

Currently: \$ _____ per week

EXHIBIT 5—Continued

16. Do you plan to change jobs within the next 6 months? ☐ Yes ☐ No
Why? _____

17. If you have worked more than 1 year, what is the difference between the work you did when you started and now? _____

18. If you ever were in the Armed Forces, how have you used your training since you left? _____

19. If you have had any special training (for example, apprenticeship or short courses) since leaving school, where did you get your training?

20. What degree, diploma, or certificate do you hold? _____
In what field is it? _____

Are you contemplating any training in the future? ☐ Yes ☐ No

If yes, explain _____

21. How do you feel about your past training experience? _____

22. Looking back at your high school experience, how has it helped you most?

How has it failed to help you? _____

23. Looking back at the counseling in high school, how has it helped you?

How has it failed to help you? _____

EXHIBIT 5—*Continued*

24. List any political organizations, clubs, or social, recreational, and church groups you have attended since you left high school. _____

What offices have you held in any groups? _____

25. Have you voted in political elections? _____

Why or why not? _____

26. In what self-improvement activities (for example, reading, home study, and the like) have you been involved? _____

27. In the remaining space, please give more information on any of the questions asked above or write anything you want about your school experiences, your present plans, or your plans for the future.

SOURCE: Adapted from Sears (1985).

responses as well as questions that can clarify previous responses

- Interviews are a good way to "sample" student and employer responses.
- Questions on complex topics can be asked.
- The initiative for completing the contact remains with the follow-up staff, thus ensuring a higher response rate than other methods.
- Reading and writing are not required of respondents.
- Public relations can be enhanced because of the personal nature of the interview.
- Interviewing may get better data and a higher response rate than mail surveys with some special populations who would be less likely to respond to a mail questionnaire.
- The personal characteristics of the interviewer can affect the interviewee's responses. Unusually good rapport between the interviewer and interviewee can lead to a candid and in-depth interview.
- Data collection is more flexible; respondents may answer in their own words.
- Additional questions may be asked to clarify hazy responses.

Disadvantages

- This procedure can be very expensive in that it requires a great deal of staff time.

- For personal interviews, the cost of transportation is significant, especially if participants are not easily accessible.
- Trained interviewers are necessary. Interviewer bias may be introduced.
- Some interviewees may feel threatened. As a result, they may not answer all of the questions truthfully.

Developing an Interviewing Guide

The structured interview should be conducted by a trained interviewer using a carefully designed guide. The guide can be relatively simple if only one person is doing the interviewing. The more people involved, the more carefully the guide must be structured. In a "structured" interview, it is important to direct both what is said and how the information is recorded. This direction, provided through a guide that is somewhat similar to a movie script, is necessary in order to ensure that common data is collected in a standard fashion. Obviously, consistency is important.

The method of developing an interview guide basically is the same as for developing a mail questionnaire. Starting with the objectives, criterion questions can be identified. Based on these questions, interview questions can be developed. Although it is possible to include open-ended items on a mail questionnaire, they can be much more effective in an interview since the interviewer can probe more deeply topics that were not on the guide.

For open-ended questions, a set of response categories is developed into which the respondent's answer can be placed. Occasionally, a response will be placed in the "other" category, although it usually is possible to develop categories that will cover 90 to 95 percent of the responses.

Steps in Data Management and Reporting

Data management includes three vital tasks, namely, storing data, analyzing data, and disseminating the results

Data Storage

Two initial steps need to be taken when setting up a data storage system. First, the filing system for returned questionnaires must be developed before the questionnaires are mailed. Second, the questionnaires should be processed as they are returned. This step involves recording the returned questionnaires on a follow-up record, labeling them, checking them for completeness and usability, coding responses, transferring the responses to a summary sheet.

Undoubtedly, the primary decision to make is whether to use a manual or automated system. There are clear advantages and disadvantages of each. For example, manual systems are adequate for smaller samples. The key, however, is planning ahead. Summary data sheets, master lists, and a filing system need to be prepared. With a manual system, it is especially important to tabulate the questionnaires daily since hand tabulation requires much staff time. Summary data sheets are designed so they are easy to complete. Automated systems, on the other hand, are usually computer operated. A computer system obviously saves time and effort in data storage and analysis for large samples. However, computers are not "magic," for they do require extra time and expense. The data must be prepared so that it is "machine readable." This takes time. The costs involved in using a computer for data analysis are usually in the programming, data entry, and the computer time used.

The following steps are involved in using a computer for data analysis:

- Staff members must locate facilities and become familiar with their operation. This usually involves meeting with technical staff who can assist in data preparation and entry.
- A program to analyze the data must be selected. Many follow-up studies only use

descriptive statistics. In these cases the selection of a program may not be very involved. If inferential statistics are to be used, more care will need to be exercised in the selection of the program. Standard statistical packages are available and the staff at the computer center usually can give advice on the best package for the needs of the study.

- The data must be rendered into machine readable form. This usually involves key-punch, tape, or disk type of data entry.
- The prepared data is fed into the computer and processed.
- The printouts are received and must be checked for error messages and any corrections to the program, method of data entry, or data itself should be made if required.
- The last step is to examine the printouts to determine the results of the survey.

Analyzing Data

Several steps are involved, depending on the type of data collected and the purposes for which it is used. For example, reviewing the questionnaires, developing coding systems for the responses, recording the response on summary data sheets, and identifying the results.

- *Reviewing questionnaires.* As questionnaires are returned—or telephone or personal interviews are conducted—the responses should be checked. This is especially true for mail questionnaires where often it is not possible to use some because of incorrect or incomplete responses. If possible, respondents submitting unuseable questionnaires should be contacted by phone to complete or correct the desired information.
- *Developing a coding system.* The method and type of coding system developed depends on whether open-ended or forced-choice items are used in the question-

naires. Forced-choice items present the most direct route to coding since the options for each item are defined, as on the following example:

Check the box of the item which best describes your current status.

- ☐ unemployed, seeking work
- ☐ employed full time (more than 30 hours/week)
- ☐ employed part time (less than 30 hours/week)
- ☐ employed in the home not for pay
- ☐ other _____

The codes could be developed as follows. No response = unemployed, seeking work = 1, employed full time = 2, employed part time = 3, employed in the home not for pay = 4, and other = 5.

Some open-ended questionnaire item categories could be devised without reviewing all of the questionnaire responses. For example, on the item *What is your present address?*, mutually exclusive categories could be devised:

- 0 No answer
- 1 Hometown
- 2 Wisconsin (not hometown)
- 3 Midwest (not Wisconsin)
- 4 U.S. (other than Midwest)
- 5 Not U.S.

On other open-ended items, each of the individual responses would have to be reviewed and categories developed based on the answers obtained. The following response categories were developed upon reviewing responses to the item *Judging from your own experience, what could schools do better to prepare young people for marriage?*

- 0 No answer
- 1 Don't know, nothing, not the job of the school
- 2 Teach practical skills, for example, buying, tax preparing, and the like.

- 3 Facilitate learning in interpersonal relationship skills
- 4 Role change (counteract sex role stereotyping)
- 5 Emphasize traditional sex roles
- 6 Other

Summarizing Data

Once the coding system has been developed and each item on the questionnaires coded, the codes are transferred to summary data sheets.

See figure 2 for an example:

For most follow-up studies, descriptive statistics and summaries of responses are all that is necessary. In a few cases, especially when sampling procedures are used, inferential statistics may be needed. The numbers and percentages identified through the summary data sheets can be further developed so that they can be depicted in charts, graphs, or figures.

Identifying Results and Drawing Conclusions

Identifying results and drawing conclusions simply involves referring to the original objectives. The results are obtained by translating the data into written statements that describe what was found; conclusions then are drawn by comparing the results to the objectives in order to determine which have been met. For example, if the goal was to evaluate effectiveness of the school's follow-through services, the analysis would indicate which services are adequately provided, which are provided but not adequately, and which are needed but not provided. For example, one item used to measure follow-through services often is whether or not post-placement counseling has been received. The results would be stated as follows: 60 percent of the respondents received postplacement counseling; 30 percent did not; 10 percent were not placed on a job. The conclusions depend on the program goals, that is, if postplacement counseling was to be provided to all placed students, 60 percent could be considered "poor" because the goal was not met. If such counseling was to be delivered to only those indicating a need for

SUMMARY DATA SHEET BY ITEM FOR ALL RESPONDENTS					
ITEM	N	RESPONSE	TALLY	NUMBER	%
1. Employment status	200	0 = No response		7	3.5%
		1 = Unemployed		6	3%
		2 = Employed full time		100	50%
		3 = Employed part time		20	10%
		4 = Employed in home		60	30%
		5 = Other		7	3.5%

Figure 2. Sample summary data sheet

it, 60 percent may be "good" in that the goal may have been met or exceeded.

Reporting Data

The following factors need to be considered for developing an effective report: the intended users, the intended audiences, and the report's content.

Intended Uses

When preparing the report, the intended users need to be carefully considered for they influence what data are reported, how data are reported, and to whom data are reported. Consider the following uses of the data and the factors affecting usefulness:

- Follow-up data can be used to substantiate quality programs and positive situations.
- Follow-up data tend to reveal what kind of courses and programs students should not be trained in. They cannot always reveal what alternative courses should be offered.

- Although data can be used to assess teacher effectiveness, students often tend to rate courses according to their feelings about the teachers. Teachers rated low may be excellent teachers.

- Follow-up data many times provide the impetus for change but rarely should be the basis for change. Information must be gathered from as many sources as possible before action is taken.

- Studies may indicate certain areas of concern, but many times there is no follow-through on them. It is the job of the appropriate administrator to use the information to make needed changes.

- Some administrators and teachers are not convinced of the benefits of using follow-up data. These benefits must be revealed if the data is to be used effectively.

- Some administrators and teachers feel threatened by the revealing look at the conditions in their schools provided by follow-up studies. This threat must be minimized to ensure the best use of the data.

- Follow-up is a slow process period. It may take several years for significant trends to appear. If a significant trend appears to emerge, it should be checked against information from as many sources as possible.

Intended Users

The intended uses of follow-up studies help determine who should receive copies of the report. If program improvement is a goal, part of the study should focus on the effectiveness of the programs as preparation of the students for work or further education. In this case, teachers, counselors, and administrators directly responsible for program operation are an important audience. Several different groups can be identified who are likely recipients of the follow-up report, namely, administrators, teachers, advisory committee members, school board members, employers, community groups, and program personnel (for example, placement coordinators, evaluators).

Content

In most cases, several versions of the report will need to be prepared. Several types of reports are highlight reports, executive summaries, technical reports, and federal- or state-mandated reports. When preparing reports, consider the intended users' needs. The highlight report—which contains brief summaries of the major findings—can be used as a public relations tool. The executive summary may contain brief statements of the major findings and recommendations. This type of report is useful for top-level administrators, employers, parents, or others who are interested in the findings but may not be instrumental in implementing changes based on the results. Federal- and state-mandated reports usually have specified formats. Their requirements may influence the original design of the study. All of the reports obviously are based on the full technical report. The users of this report vary, but tend to be those responsible for conducting the study and those responsible for implementing the recommendations.

Here are some suggestions to consider in preparing reports:

- Set up local reports based on local requirements but also include information required by state and federal mandates that relates to local programs receiving external support.
- Analyze data as much as possible; however, not all information need be presented.
- Make tabular summaries in the shortest possible form. Oral presentations are best with this type of information.
- The comments section of a survey instrument is very important. This area may reveal needs and shortcomings, especially if a particular comment is repeated.
- Scan the comments section for the most frequently mentioned items and make summaries for their inclusion in reports and presentations.
- Present data on courses and programs—not teachers. Many students react to questions about courses or programs by the nature of her or his relationship with a teacher, which biases the data.
- Keep sophisticated statistics in a separate section for those who wish to review them but do not present statistics throughout a report.

Disseminating Results

The final step is to disseminate the results and plan for action based on the results. Several considerations to keep in mind are as follows:

- Go through the proper chain of command when presenting data—school board or board of trustees, superintendent or presidents, administrators, and so on.
- Send an accompanying form with follow-up reports to be filled in by the recipient of

the report, showing who used the data for what, how, and so on. This is a good way to identify who is using the data.

- Since many reports involve data comparisons, have state, district, and institutional data available for some presentations. However, avoid school-to-school comparisons.
- When presenting information to a board of education, report only the aspects that are of immediate interest. Follow-up information unrelated to board policies should not be included.
- Other agencies that likely can use follow-up data are chambers of commerce, state employment service and offices, and Private Industry Councils.

A number of methods of disseminating results can be used, for example, inservice workshops, advisory council meetings, school board meetings, public meetings, and news media. However, remember that (1) decision makers cannot take appropriate action unless

the findings are effectively communicated, and (2) communication involves much more than preparation of the report. Communication also involves providing opportunities for discussing the findings and recommendations. Develop a short form to be included with the report so that recipients can assess the report's usefulness, timeliness, and readability.

The person responsible for coordinating the study also has an obligation to see that as many of the recommendations are implemented as possible. It often is fairly easy to quickly implement some of the recommendations. However, implementing other recommendations may require much time and/or money. The key is to see that as many data-based recommendations are made for program improvements as possible.

Follow-up studies can be an important tool for improving programs—particularly if they are well organized and effectively implemented. Although implementation of program improvements is obviously never an easy task, when needed changes result in higher-quality programs, the task is worth the effort.

Some Important Special Concerns

How language is used in follow-up studies, the issue of confidentiality, and the needs of special populations are other concerns that need to be considered.

Stereotyping Language

The use of stereotyping language in constructing data collection instruments and reports obviously decrease their effectiveness. Stereotyped items on the questionnaire may decrease the response rate or bias the responses; stereotyped language in the report may hinder implementation of the report's recommendations. Several suggestions may help to ensure that the materials are free of stereotyped language, for example:

- Use neutral terms in identifying occupations or describing labor markets.

- Use names that are different from a white, middle-class orientation.
- Use items that represent a variety of lifestyles, socioeconomic levels, handicaps, and the like.
- Use language that depicts males and females in nontraditional occupational roles.

Confidentiality

It is important to let respondents know that their responses will be kept confidential. There is a difference between confidentiality and anonymity. Anonymity means that the respondent cannot be identified. Usually this is not the case. It is important to code questionnaires and interview response sheets so that nonrespondents

can be identified and contacted. For most follow-up studies, it is not appropriate to ensure anonymity. Confidentiality refers to protecting the respondents' identity by not reporting information in such a way that anyone can be identified. All questionnaires should be coded and referred to by their code numbers. In this way, only those responsible for managing the data collection process will be aware of who has and has not responded.

Care also should be taken in the way data are formatted and reported so that individuals cannot be identified. Although this is not usually a problem if aggregate statistical data is used, it may be a concern when reporting qualitative data and respondents' comments. Care should be taken in these instances not to reveal the respondent's identity. Another concern is that specific individuals mentioned by the respondents (teachers, counselors, principals) also should be deleted from comments reported.

Special Populations

Follow-up studies of special populations are similar in design to studies of mainstream populations. However, certain techniques may vary based on the characteristics of each special population. Although, typically, respondents are asked standard questions similar to other respondents, other important types of information should be gathered. The following questions illustrate several of these special concerns:

- Is the female head of the household unable to find a job or attend school because she cannot afford child care or transportation?
- Is the academically disadvantaged student unable to find a job because he or she cannot complete the application?
- Is the handicapped student unable to work or attend school because of physical barriers?
- Is the limited English-speaking person unable to obtain a job or attend school because he or she cannot work as a member of a team because of communication difficulties?

Just as educational needs are sometimes different for special population students, data collection strategies also may differ. For example, severely handicapped students may not be able to complete a mailed questionnaire, whereas economically disadvantaged persons may be hard to locate.

The techniques of the follow-up process also may need to be modified. For example, the use of telephone or personal interviews may be more appropriate with some special populations. Although time consuming, interviews may eliminate many barriers presented by mail questionnaires. The following are just a few suggestions for modifying data collection procedures for special populations.

- *Mildly mentally handicapped*

- Use simple and concise language
- Keep the sentences short.
- Verify that the reading level is at or below the learner's ability.
- Use nonverbal response scales whenever possible.
- Provide simple directions and several examples for responding
- Repeat directions as needed.

- *Visually disabled*

- Use instruments prepared in braille or with large print.
- Use auditory means of communication (cassette tapes)
- Use special or supplementary lighting, as needed.

- *Hearing disabled*

- Use a total communication approach that includes lip reading, signing, and finger spelling.

- Provide favorable seating for partially hearing students

- Employ necessary sound amplification devices.

- Use special devices to improve acoustics.

- *Learning disabled*

- Use modes for responding that do not involve extensive writing or speaking

- Have instruments reviewed by a learning disabilities consultant

- Watch the student for cues that any difficulty is being encountered.

- *Physically handicapped*

- Provide large response boxes for individuals who exhibit poor fine motor coordination.

- Provide adaptive equipment where situations warrant it.

- *Emotionally disturbed*

- Make the situation as nonthreatening as possible

- Watch the individual in a follow-up interview in order to spot potentially disruptive situations.

- *Limited or non-English speaking*

- Translate follow-up instruments into the native language

- Allow a bilingual person to administer the instrument

- Carefully review the cultural fairness of your instruments or interview schedule.

Parent involvement

With special populations, it often is useful to combine follow-up studies with the delivery of follow-through services. Parents can be encouraged to get involved in the follow-up study and follow-through services through the use of a booklet explaining these processes. Components could be such items as the following: reasons for conducting follow-up after referral, reasons for conducting follow-up after successful placement, uses of follow-up information, and the role of parents in the follow-up process. The booklet could provide a basis for their understanding and cooperating with school personnel in implementing the process.

Planning for Follow-Through Services

Types of Services

The four main follow-through program areas are job search assistance, job adjustment counseling, career and educational planning, and personal and family counseling. Obviously not every school is prepared to deliver all of these services. Nor is each of these areas equally applicable to all schools or student populations. However, a variety of approaches could be used to deliver these services as needed, including referral to outside agencies that provide support beyond the scope of the school's resources.

Job search assistance and job adjustment counseling are primarily applicable when preparing students for work. Job search assistance should begin before the student leaves school with both formal and informal preparation activities and should continue until placement. In some cases, as with the use of career passport materials, job search activities are readily incorporated into the curriculum. Job adjustment counseling usually is not provided until after placement. However, when students who are likely to have difficulty adjusting to the workplace are identified, appropriate counseling should begin. Although career and educational planning should be a part of every student's program, efforts to assist students in developing career and educational plans should not stop when the student graduates. A variety of factors may cause students to change their plans after leaving school. These students should be able to call on the school's counselors and resources. Last, although personal and family counseling often is beyond the school's resources, it is widely recognized that personal and family problems interfere with a student's success both

during school and after leaving. However, identifying potential problems—followed by appropriate referrals to other agencies—is within the scope of a school's responsibility.

Job Search Assistance

Successful job search assistance programs have the following common elements: an attempt is made to increase the number of opportunities for potential employer contact, information is provided on how to identify and approach potential employers, job search skills are demonstrated and the student is given an opportunity to practice them, and an attempt is made to influence work-related attitudes and behaviors, which in turn may be expected to improve chances for success in obtaining employment. Because of the importance of job search as an activity for all students, this topic is discussed in-depth in the guidelines dealing with student placement.

Job Adjustment Counseling

Job adjustment counseling is appropriate for students leaving school and starting work. In fact, evidence exists that even good students may experience job adjustment problems (Ashley et al. 1980).

For members of special populations, however, the need for counseling may be more acute. Counseling can help them cope with the new job environment, deal with values that are

new or may seem alien; handle stresses arising from cultural, linguistic, and sex role conflicts; and resolve work-related problems that may arise.

Although the specific problems that may confront new workers are as varied as the workers themselves, the following general points should be considered in designing services:

- Providing services at the proper time is critical. If provided too early, the counseling will lack relevance. On the other hand, early detection of a potential problem can avert a crisis.
- Timely intervention necessitates ongoing assessment within a stable counseling relationship. If mechanisms are available for individuals to interact easily with staff, the need for counseling is much more likely to be recognized at a time when it can be helpful.
- Adjustment problems seldom occur singly. Individuals often have multiple problems. A combination of counseling approaches may be appropriate or counseling may need to be combined with other services, such as referral to outside support services.
- The primary goal should be individual independence. Counseling should encourage the individual to develop skills that help self-sufficient workers cope with work problems.

A number of counseling approaches could be used. For example, group counseling may include sensitivity training, role playing, and simulation and gaming techniques. Individual approaches normally include modeling (students observe a role model performing a task and then attempt to duplicate that task) and exploratory experiences (students are placed temporarily on a job in which they are seeking employment). In selective placements, students are placed in carefully chosen jobs to avoid a particular adjustment problem for which the potential has been noted.

Job adjustment problems may develop in a number of areas, for example.

Personal work habits

- Work time punctuality, absence, recording work time, staying on the job
- Qualitative accuracy, carefulness, neatness
- Quantitative output, meeting deadlines
- Responsibility: diligence, following through, initiative, volunteering, mature deportment
- Attitudes: flexibility, integrity, honesty, loyalty
- Time management, prioritizing work, using time well, completing work on time

Interpersonal relations

- Relationships with supervisors, communication, accepting supervision, following instructions, accepting criticism
- Relationships with co-workers, getting along, fitting in, positive attitudes, helping others
- Dealing with tension on the job
- Dealing with prejudice

Organizational adaptability

- Official policies, knowing company policies, and procedures
- Unofficial rules, learning the unwritten rules, protocol, sources of "inside information"
- Advancement: criteria for raises and promotions, flexibility, dealing with change

Job satisfaction

- Need for affective rewards: recognition, approval, sense of contribution, advancement, affiliation, pride in work
- Tolerance: routine work, pressures of schedule
- Personal factors: self-image, self-confidence, values
- External problems: family, personal, health, legal, child care, financial

- required skills and attributes (for example, manual dexterity, good vision),
- other prerequisites (for example, license, certification, union membership),
- equipment used,
- degree of supervisory responsibility,
- kind of supervision received.

- Instructing students on the decision-making process to facilitate their choosing career paths that match their interests.

Career and Educational Planning

The two main aspects of career and educational counseling are career planning assistance and referral to education and training programs.

Career Planning Assistance

Assistance can be given in several ways. For example, counseling can be delivered through structured group activities, although targeted at individual needs. Individuals with career-related problems also can be counseled on a one-to-one basis and should be directed to career information that guides them in selecting career paths. Individuals who need additional assistance may be referred to community services. Regardless of the methods used, the following areas should be considered when assisting students:

- Assessing skills, interests, occupational aspirations, and personality traits by using aptitude and achievement tests, interest inventories, personality evaluations, and other instruments.
- Acquainting students with career options by using up-to-date career materials. Career information should include—
 - nature of work,
 - working conditions,
 - hours of work,
 - salary or wage range,
 - opportunities for advancement,

Referral to Education and Training Programs

Referral links students to opportunities for further education and training. After students have decided on their goals, they should be helped to identify their own short- and long-term education and training needs and to locate programs that might satisfy those needs. For example, a student might need to upgrade basic academic skills and then enter relevant postsecondary vocational training. First, institutions must be identified that offer the type of training the student needs. The counselor then should help the student acquire enough information about each program to be able to make a decision about where to pursue training. Communication should be established with the admissions staff of the training program in order to inform them of the individual's goals and needs. During these contacts, information can be obtained about the application procedures, selection process, and other entry matters.

In addition, school staff involved in offering follow-through services should maintain linkages with such institutions as proprietary schools, technical institutes, business and trade schools, business or government-sponsored training programs, community colleges, universities, adult education programs through public schools, correspondence courses, and apprenticeships.

Personal and Family Counseling

Personal and family problems may seriously interfere with a student's performance in school or on the job. In many cases, these problems

may be outside the school's domain. In those cases, referrals should be provided for those who need help. A referral handbook that pro-

vides basic information about service deliverers also is very useful.

Developing and Delivering Services

Several tasks are involved in developing a program to deliver follow-through services. Many are similar to those for developing follow-up studies.

Define Goals and Objectives

The goal of a follow-through program primarily is to monitor and support institution leavers in order to help them maximize their employment and/or further education success and career progression. To achieve this broad goal, the specific objectives typically are as follows:

- To assess the needs of students both before and after they leave in order to determine their need for follow-through services
- To provide such services based on the needs of the students and former students
- To evaluate the services in order to improve program planning and design

Identify Staff

Two types of staff generally are needed: a coordinator and a staff of counselors. Their roles are briefly described below.

Coordinators

The primary duties of the coordinator are assigning and monitoring the counselor case load; designing, implementing, and evaluating services; coordinating functions within the program; and coordinating services with related programs and agencies.

Counselors

Typically the counselors' services include the needs assessment, placement assistance, individual and group counseling, job search skills training, career and educational planning assistance, identification of training opportunities, and referral to appropriate agencies. Counselors also assist the coordinator in administering and evaluating services.

Evaluate the Effectiveness of Follow-Through

The primary sources of evaluative information are former students and employers and other educational institutions.

Former Students

Former students contacted in follow-up studies can provide useful information on their need for and their awareness of follow-through services. If former students are unaware of the services or do not feel they would be helpful, the follow-through program may not be promoted properly or may, for various reasons, have a negative image among the former students.

Also, former students who receive follow-through services should be contacted to determine if the services were helpful. This type of follow-up to follow-through may be one of the most effective means of determining if the services are effective.

Based on follow-up reports of follow-through services, several indicators can be used to determine follow-through program success, for example, the number of students served, the types and number of problems addressed, and the types and number of services offered.

Employers and Other Institutions

Routine contact with employers, other educational institutions, and community agencies can provide another means of determining the effectiveness. Follow-through staff should become aware of problems of former students from the perspectives of employers, teachers and administrators, and community agency staff. The nature and scope of problems identified by these groups can indicate the need for additional follow-through services as well as help determine the effectiveness of current services.

Settings for the Delivery of Services

As previously noted, follow-through services should begin before the student leaves school. Several opportunities are available for assessing student needs and for delivering services, for example: orientation programs, termination interviews, follow-up contacts, employer and school contacts, and follow-through contacts. In addition, the group and individual methods described in the guidelines on placement can be used to conduct follow-through services.

Orientation

Several orientation programs should be developed for the school staff, board of education, employers, community members, and students. These programs serve several functions, primarily explaining the services and preparing students to leave the school. A descriptive booklet could be prepared that explains the services provided. Teachers should take the responsibility of informing their appropriate colleagues of students who are not likely to ask for help, but who may need follow-through services.

Termination Interviews

Many institutions conduct a termination interview with students who are leaving. Appropriate staff should be present in order to reinforce to the student what services are available. This is an excellent opportunity to get feedback from students on their preparation for

work or further schooling as well as to assess their needs for follow-through services.

Follow-Up Contacts

Offering follow-through services and determining individual need for such services can be accomplished through formal follow-up contacts. Follow-up questionnaires or interviews can include items that emphasize follow-through services. Also, a section of the questionnaire or a portion of the interview can be devoted to identifying what kinds of difficulty former students are experiencing. Names of students identified through such contacts should be forwarded to the appropriate school staff.

Employer and School Contacts

Placement specialists, counselors, co-op coordinators, administrators, teachers, and other appropriate staff all make contacts one way or another with both employers or schools where former students either are employed or attend. These contacts provide an excellent opportunity to identify follow-through needs of former students and also present the opportunity to coordinate services to ensure the smooth transition of students.

Follow-Through Contacts

The responsible staff can use contacts with one former student as an opportunity to inquire about other former students. This system of networking can increase support among former students as well as help identify students with a need for follow-through services.

Referral for Supportive Services

When it has been determined that a student needs the services of another agency, a referral should be made. Several steps should be taken in this regard, namely:

- Inform the student of available services—location, contact person, access procedures.

- Contact the helping agency and set up an appointment or arrange for them to contact the student.
- Follow up on the referral by contacting the student and/or the helping agency to learn whether the student is receiving needed assistance.
- Be aware of laws and agency policies regarding confidentiality of records and information that can be shared

Students should be encouraged to take as much responsibility as possible for following through on referrals. The degree to which the counselor takes part in this process is a matter of professional judgment and should be based on the individual case.

Many community agencies and institutions provide supportive services by problem areas. Surely other resource groups can be added. See exhibit 6.

EXHIBIT 6

AGENCIES AND INSTITUTIONS PROVIDING SUPPORT SERVICES BY PROBLEM AREAS

Problem Areas	Potential Resources
Child care	<ul style="list-style-type: none"> — Community action agencies — Churches, synagogues, and other religious organizations — Day-care centers, nurseries, and preschools
Chemical abuse sensory handicaps	<ul style="list-style-type: none"> — Alcoholics Anonymous, Al-Anon, and Al-a-Teen — Clinics and mental health centers — Local treatment and crisis centers — Hospital treatment programs — Employer support groups
Physical and sensory handicaps	<ul style="list-style-type: none"> — State Rehabilitation Services — American Council of the Blind, Society for the Prevention of Blindness, and other groups that work with the visually impaired — National Association of the Deaf and other groups that work with the hearing impaired — Neighborhood health centers — State division of crippled children's services — Easter Seal Society and organizations that deal with specific disabilities — Goodwill Industries — Veterans Administration
Mental health and retardation	<ul style="list-style-type: none"> — Community mental health centers — Association for the Developmentally Disabled — Council for Retarded Citizens — Local programs for counseling, suicide prevention, and other crisis intervention — State and county divisions of mental health, mental retardation, and special education — Counseling programs sponsored by religious or private organizations

Physical health	<ul style="list-style-type: none"> — Neighborhood health centers, clinics, and nursing services — State and county departments of public health — Hospitals — Organizations for specific conditions such as the Cerebral Palsy Association, Cystic Fibrosis Research Foundation, Diabetes Association, Epilepsy Association
Transportation	<ul style="list-style-type: none"> — Metropolitan car pooling systems — Bus companies and transit authorities (for schedules and routes) — State Rehabilitation Services — Ride programs of individual employers and ride ads posted at companies and schools
Legal problems	<ul style="list-style-type: none"> — Legal Aid, legal rights services, and legal clinics — Bar Association — Law schools — City prosecutor office — Court of Common Pleas — Municipal Court
Economic problems	<ul style="list-style-type: none"> — Community action agencies — Consumer credit counseling services — Welfare Departments (city, county, and State) — Utility companies — Local housing departments — Food banks and community pantries — Religious groups and local charities with food and clothing programs
Minority group status	<ul style="list-style-type: none"> — Community action agencies — Community-based organizations — Native American Centers — National Organization for Women and other women's support groups — Migration and resettlement services — Refugee resettlement services
Ex-offenders	<ul style="list-style-type: none"> — Halfway houses — YMCA and YWCA — United Way
Basic skills	<ul style="list-style-type: none"> — Adult basic education programs — Basic Skills Unlimited and similar programs — English-as-a-Second Language programs — Literacy Councils
Family interaction and miscellaneous problems	<ul style="list-style-type: none"> — Community mental health centers — Interfaith counseling services sponsored by religious groups — Youth organizations — Big Brother/Big Sister — Family counseling services — Local hotlines and crisis services — Community groups focusing on particular domestic/personal problems, such as Parents Without Partners, childbirth education organizations, League Against Child Abuse, Planned Parenthood, and County Children's Services

REFERENCES

- Ashley, William L. et al. *Adaptation to Work: An Exploration of Processes and Outcomes*. Columbus: National Center for Research in Vocational Education, The Ohio State University, 1980.
- Campbell, Robert E.; Ho, Claire; King-Fitch, Catherine, C.; and Shellberg, Kenneth L. *Follow-Through Services: A Missing Link to Employment for the Disadvantaged*. Columbus: National Center for Research in Vocational Education, The Ohio State University, 1981.
- Franchak, Stephen J., and Spierer, Janet E. *Evaluation Handbook: Guidelines and Practices for Follow-up Studies of Former Vocational Education Students*. Volume 1. Research and Development Series no. 171. Columbus: National Center for Research in Vocational Education, The Ohio State University 1978.
- Pritz, Sandra. *Follow-up and Follow-through in Employment and Training Programs*. Research and Development Series no. 129. Columbus: National Center for Research in Vocational Education, The Ohio State University, 1983.
- Sears, Susan J. *Facilitate, Follow-up and Follow-Through*. Competency-Based Career Guidance Modules, Module CG C-11. Wooster, OH: Bell & Howell Publication Systems Division, 1985

RESOURCES FOR CONNECTIONS

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Introduction

Resources for Connections contains a list of references that were reviewed in developing *Connections: School and Work Transitions*. It is, therefore, obviously not intended to represent an exhaustive listing of all materials related to the topic of youth transitions. The purpose is to present a sample of the wide array of materials available through the National Center for Research in Vocational Education and other producers of similar materials.

The guide contains two sections. The first is an annotated bibliography of 150 print, audio-visual, and computer resources for administrators, teachers, counselors, students, and--in some cases--parents. The annotations identify the type of resource, the intended users, a brief overview of its contents, and, in some cases, the number of pages. For works with extensive executive summaries, the number of pages in the executive summary is noted. The bibliography includes five sections, including items on (1) general transition issues, (2) career assessment and planning, (3) school-community involvement, (4) placement, and (5) follow-up studies and follow-through services. Some of the placement items, as you will see, include follow-up and follow-through information.

The second part lists the names and addresses of 115 organizations and associations, most of them national in scope, which provide services relevant to youth in transition. This section also includes descriptions of 13 databases which can be used to conduct searches for classroom materials, program descriptions, and similar information. Lastly, this section includes descriptions of four electronic services, each offering various features that may be helpful to institutions serving youth in transitions.

Annotated Bibliography

Transition Issues

Ashley, William L., and Ammerman, H. L. *Identifying Transferable Skills: A Task Classification Approach*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1978.

A preliminary report on the feasibility of classifying occupational tasks as a basis for better understanding the occupational transferability of job skills. The goal of this report is to determine if the task classification approach has merit for further study and to suggest further research that might be useful. (72 pp.)

Ashley, W. L.; Cellini, J.; Faddis, C.; Pearsol, J.; Wiant, A.; and Wright, B. *Adaptation to Work: An Exploration of Processes and Outcomes*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1980.

A report on an exploratory study of adaptation to work, in which adaptation was viewed both as a process and as an outcome. Adaptation was defined as adaptation to the organization, job performance, interpersonal relationships, responsibility, and affective aspects. The study's findings point clearly to the importance of employers defining, as clearly as possible, their expectations of new employees with respect to their performance, role in the organization, sources of information, and relation to supervision. They point with equal clarity to the importance of preparing students for work within the formal educational system. Students need to have realistic expectations of the workplace, defined in terms of both performance and nonperformance aspects. (82 pp.)

A Time for Transition: Teenage Parents and Employment, 1985. New York: The National Child Labor Committee, 1985.

A summary of interviews with service providers, researchers, community leaders, policy makers, and public interest advocates regarding the problems of teenage parents. Topics discussed are ways of helping teenage parents as well as experimental efforts developed to assist them in the transition to economic independence. (33 pp.)

Barton, Stephanie Lang. *Career Passport*. Washington, DC: National Institute for Work and Learning, no date.

A description of the background and components of career passports. Three demonstration sites are described where career passport projects have been implemented. The appendices include materials from the projects. (36 pp.)

Bishop, John *Incentives, Learning, and Employability*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1985.

A research report focusing on how and under what conditions youth learn, or fail to learn, in secondary schools. The study addresses knowledge and skills resulting from the instructional, curricular, and contextual elements of high schools as they transfer to the workplace. (93 pp.)

Bishop, John *Preparing Youth for Employment*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1985.

A research report on the effects of education on youth's employability. The report focuses on how secondary schools prepare youth for the labor market and how better communication between schools and employers could improve this process. On-the-job training as a form of employee and employer development is also explored. (208 pp.)

Borman, Christopher. *The High School Student in the Working World: A Handbook for Counselors*. Austin: Publications Office, Texas Education Agency, 1981.

A handbook that is a self-contained sourcebook for use with students entering the world of work during or immediately after high school. Topics covered are: helping students explore their interests and potential, the career decision-making process, involving the student's family, getting hired and what to expect on the job, exploring self-employment, secondary and postsecondary vocational-technical training programs, counseling the handicapped, planning a career guidance program, sources of information on present and future opportunities, and sources of free and inexpensive counseling materials. Included are worksheets and other aids to giving non-college-bound students the career planning help they need. (116 pp.)

Borman, Kathryn M.; Izzo, Margaretha Vreeburg, Penn, Elizabeth M.; and Reisman, Jane. *The Adolescent Worker*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1985.

A study of the process by which youth learn and are trained to carry out work tasks. It traces the process by which employment is retained or lost in specific job settings. Some of the topics covered are the type of work activities that young people do, how youth workers get along with supervisors and co-workers, the nature of the training they receive on the job, and their attitude toward and adjustment to the world of work. (214 pp.)

Campbell, Paul B., and Basinger, Karen S. *Economic and Noneconomic Effects of Alternative Transitions through School to Work*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1985.

A research report based on the National Longitudinal Survey of Labor Market Experience. It describes the patterns of transitions from school to work for vocational education students. This study builds upon previous work on the effect of curriculum patterns and other influences on labor market experiences and examines the impact of vocational and postsecondary schooling on labor market and socioeconomic outcomes. (91 pp.)

Campbell, Paul B.; Gardner, John A.; and Seitz, Patricia. *High School Vocational Graduates. Which Doors are Open?* Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1982.

A report based on data gathered from the National Longitudinal Survey of Youth Labor Market Experience and from high school transcripts. Three studies are summarized. Findings are presented regarding secondary vocational education participation, labor market participation, and postsecondary educational participation. (28 pp.)

Campbell, Paul B., Gardner, John A., and Winterstein, Paul. *Transition Patterns Between Education and Work*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1984.

A report on a research study whose purpose was to identify the variety of ways young people make the transition from secondary education to employment. It examined demographic and other characteristics to find those that were associated with the selection of various routes to employment. (129 pp.)

Campbell, Paul B., Orth, Mollie N., and Seitz, Patricia. *Patterns of Participation in Secondary Vocational Education*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1981.

A report on a study that addressed evaluation research, and policy formulation issues. A set of descriptive concepts was developed that embodied commonly held assumptions about vocational education. These concepts included intensity of training, continuity of training, the proximity of training to time of employment seeking, the diversity of program areas in which training was received, and the addition of logically related study outside the main area of concentration. These concepts were made operational by defining them in quantitative terms relating to credits, points in time, and areas of specialty. Patterns of participation were then described and tested against a sample of secondary vocational education participants. (95 pp.)

Campbell, Robert E.; Wynn, George A.; and Ransom, Robert M. *Coping in the World of Work: Practice in Problem Solving*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1977.

An instructor's handbook for introducing problem-solving techniques to students to prepare them for work. The goals are to acquaint students with typical on-the-job adjustment problems, teach them a problem-solving approach to these problems, provide practice in using the problem-solving approach, apply the problem-solving methods outside the classroom, and improve their communication skills. (231 pp.)

Carnevale, Anthony P. *A Society Based on Work*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1984.

A report that surveys American economic changes and their implications for employment training. It puts into perspective the problems of unemployment and inflation, stagflation, and the changing labor market supply. Also employment and training strategies for disadvantaged and advantaged workers are prescribed. (102 pp.)

Champagne, Audrey. *Teaching for Workplace Success*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1986.

A report that addresses the importance of thinking in the workplace and the enhancement of thinking through formal education. The role of vocational education in developing a student's mental abilities is also discussed. (22 pp.)

Coleman, Deborah Dye; Beckman, Carol A., and Wheatley, Robert. *Youth Transition to Adult Roles: A Preliminary investigation*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1979

A report on a study that examined student interaction with adults as a treatment component of experiential education programs. The conceptual framework is reference group theory, or symbolic interactionism; the theme is that through participation in experiential education programs, students can expand their reference groups by beginning to include adult co-workers. This experience with adult, both program coordinators and co-workers, should aid in the transition from student to adult roles. (46 pp.)

Copa, George H. *Vocational Education and Youth Employment*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1984

A report that proposes a comprehensive array of services for promoting youth employment. It also describes the many complex causes of youth unemployment. (73 pp.)

Corridors to Careers: A Guide for Parents and Disabled Youth. Omro, WI. The Conover Company, Ltd., 1986

Materials developed by the National Center and divided into three separate guides. The first provides information and activities on career exploration, vocational assessment, and effective planning for transitions. Topics include identifying abilities and interests, determining available jobs, locating training options, identifying necessary modifications in the work site, and using the Individualized Education Plan (IEP) to facilitate the transition process. The second guide provides information and activities on job search and survival. Topics include obtaining job leads, writing application letters and resumes, interviewing effectively, and developing good work habits. The third guide provides information and activities on developing independent living skills. Topics include identifying transportation needs and options, determining housing needs and options, developing home management skills, improving decision-making skills, and building interpersonal skills.

Curriculum and Instruction in the Experience-Based Career Education Handbook series. Portland, OR. Northwest Regional Educational Laboratory, 1976.

One of five handbooks that detail how to set up and operate an experience-based career education program. This volume describes how to develop curriculum outlines, learning plans, career explorations, projects, learning and skill building levels, competencies, student journals, employer seminars, and learning resources. (636 pp.)

Desy, Jeanne; Campbell, Paul B.; and Gardner, John A. *High School Vocational Education Experiences: In School and in the Labor Market*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1984.

This report was written to synthesize and clarify significant research findings for those with a need to be informed on the effect of vocational education. As a compilation of research, it should be a particularly useful source for those involved in policy-making. The research summarized here focuses on the effects of vocational curricula on students, graduates, and dropouts from vocational programs. Particular emphasis has been given to their labor market experiences, both in high school and beyond. (64 pp.)

Expanding Career Horizons. Macomb, IL: Curriculum Publications Clearinghouse, Western Illinois University, 1979.

A kit which helps to change attitudes about occupational stereotypes of both male and female students from the seventh grade level through postsecondary programs. The activities presented encourage all students to consider any occupational field, traditional or nontraditional. There are five sections: implications of sex role stereotyping in jobs, court cases on sex discrimination in employment for role playing, labor force statistics, factors that affect an individual's standard of living and cultural conditioning toward sex bias in aptitude tests and interest inventories.

Fitzgerald, Louise F. *Education and Work: The Essential Tension*. Columbus: ERIC Clearinghouse on Adult, Career, and Vocational Education and The National Center for Research in Vocational Education, The Ohio State University, 1985.

A paper addressing the relationship of education and work. Topics discussed are the role of education in our society, the empirical relationship between education and occupational attainment for blacks and women, the specific relationship between education and work regarding basic skills, general employability skills, and occupational adaptability and transferable skills, and the effectiveness of various environments and programs for teaching and learning. (47 pp.)

Gardner, John A., Campbell, Paul; and Seitz, Patricia. *Influences of High School Curriculum on Determinants of Labor Market Experiences*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1982.

A research report on the effects of participation in vocational education on the labor market experiences of high school graduates. The report shows that vocational education has both a direct and an indirect effect on earnings, income, and unemployment and that the indirect effects operate through intervening variables such as job search methods, unionization, industry, occupation, job tenure, labor market experience, and postsecondary education. (188 pp.)

Hamar, Rosalind. *Women In Nontraditional Careers (WINC) Curriculum Guide*. Portland, OR: Northwest Regional Educational Laboratory, 1981.

A comprehensive source of ideas, activities, and resources for teachers, counselors, youth workers, and others as they help young women understand historical, current, and future perspectives on women and work; understand themselves and their own interests, skills, and abilities; and plan careers by considering the broadest possible range of potential jobs and access routes. Topical units in the guide are designed for flexible use in a variety of sequences, combinations, and settings. Included are the following sections: "Women and Work: Today and Tomorrow," which assesses the place of women in the job market and discusses the jobs of the 1980s; the 1980s; "Community-Based Job Exploration," which provides community-based nontraditional job exploration, and "Access to Careers," which explores career paths leading to nontraditional jobs.

Herr, Edwin L. *Work-Focused Guidance for Youth in Transition: Some Implications for Vocational Education Research and Development*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1978.

A paper which addresses the meaning of work-focused guidance. Four issues are discussed: employment as the outcome of work focused guidance; using work activity or the work set-

ting as a guidance technique; preparation of counselors for work-focused guidance, and the meaning of work in relation to either the content or the description of the guidance process involved

Hollenbeck, Kevin. *Hiring Decisions: An Analysis of Columbus Employer Assessments of Youthful Job Applicants*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1984.

An analysis of the responses of 56 Columbus area employers to simulated job applications and interviews. Issues such as the following were evaluated: the relative importance of various attributes that appear on job applications; the value of postsecondary education; the value of vocational education, work experience programs, and cooperative education programs; part-time work experience during high school, and eligibility for subsidies such as targeted jobs tax credit. (Executive Summary, 77 pp; Technical Report, 187 pp.)

Hollenbeck, Kevin, and Smith, Bruce. *Selecting Young Workers: The Influence of Applicants' Education and Skills on Employability Assessments by Employers*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1984.

A research report of employers' assessments of the preparation of youth for employment. (Executive Summary, 50 pp.; Final Technical Report, 110 pp.)

Hotchkiss, Lawrence, Bishop, John H.; and Gardner, John. *Effects of Individual and School Characteristics on Part-Time Work of High School Seniors*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1982.

A research report on youth who are employed part-time while in high school. The variables examined are hours worked per week, labor force participation, wage rate, and unemployment. An economic model incorporating leisure-time, school-time, and work-time was developed and tested to demonstrate how school and work compete for students' time. The study also examines the effects of the characteristics of the school a youth attends on work-related variables. (43 pp.)

Hotchkiss, Lawrence. *Effects of Work Time on School Activities and Career Expectations*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1982.

A report that examines effects of working part-time while attending high school on five school-related outcomes, on career expectations that youth hold for themselves, and on career expectations that parents hold for their children. The empirical results show little support for the general hypothesis that working interferes with schooling. Hours worked have no effect on days absent from school, days tardy from school, number of extracurricular activities, transcript grade point average, or self-reported grades. Additionally, it is found that working does not affect career expectations of youth or career expectations that parents hold for their children. The analyses conducted for this report do not reveal any reasons to question policy recommendations that youth be encouraged to work part-time while in secondary school. (36 pp.)

Hotchkiss, Lawrence; Kang, Suk; and Bishop, John. *High School Preparation for Employment*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1984.

A report on four studies related to preparing youth for employment after leaving school. The first study uses an interaction model to examine effects of curriculum on learning of basic skills. The second study investigates determinants of employment outcomes during high school. The third study focuses on the effects of high school curriculum and performance on post-high school employment experience of noncollege youth. The fourth study extends the third by adding high school employment variables as predictors of post-high school employment. (147 pp.)

Hunter, Andrea. *Partners for Youth Employability: An Idea Book for Educators and Employers*. Portland, OR: Northwest Regional Educational Laboratory, 1982.

A book based on findings from Experience-Based Career Education, that presents ideas on ways for youth-serving institutions to help young people prepare for the realities of the work place. (24 pp.)

Jones, Joan, Watts, Rebecca, and Downing, Sybil. *Work Experience and Academic Credit: Issues and Concerns*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1979.

A report designed to assist local education agency representatives and prime sponsors in initiating and implementing the awarding of academic credit for work experience. The report does not prescribe methods for doing so, but presents a range of issues and concerns as identified by experts involved with the mechanisms of credit awarded for work experience. The report presents these issues and concerns as a series of questions and comments. (113 pp.)

Kaagan, Stephen. *Education for Work, K-12*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1986.

A paper that reexplores the concept of the comprehensive school and the theory that institutions must provide coherent and balanced educational offerings that respond to individual capabilities in order to meet emerging demands in the workplace. (14 pp.)

Lemons, C. Dale. *Education and Training for a Technological World*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1984.

A report summarizing changing skill requirements and other changes resulting from the technological revolution. It focuses on the need to make educational adjustments and methods for doing so. (42 pp.)

Levin, Henry M. *Education and Jobs in a Technological World*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1984.

A report that examines the controversy over the effects of high technology on jobs and skill requirements for those jobs and analyzes the related issue of general versus specialized education. (28 pp.)

Littrell, J. J. *From School to Work: A Cooperative Education Book*. South Holland, IL: The Goodheart-Willcox Company, Inc., 1984.

A textbook for students (320 pp.), an instructor's guide (80 pp.), and an activity book for students (128 pp.) to assist students in meeting their responsibilities as cooperative education

students and in the transition from school to work. Topics covered include cooperative education, skills for work, career planning, job search, job satisfaction, consumer responsibilities, and leadership skills.

Management and Organization, in the Experience-Based Career Education Handbook series. Portland, OR: Northwest Regional Educational Laboratory, 1976.

One of a set of five handbooks which detail how to set up and operate an experience-based career education program. This volume includes sections on program planning and governance, staffing, budgeting and managing office details and transportation, and developing community relations. (292 pp.)

McKinney, Lorella A. *Extending Horizons: A Resource for Assisting Handicapped Youth in Their Transition from Vocational Education to Employment*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1985.

An inservice guide and six companion documents that assist the process of school/community team support for handicapped students. It details participant roles and the steps for forming and preparing teams based on individualized education programs. The documents can be ordered as a set or individually.

McPartland, James M.; Dawkins, Russell L.; and Bradock, Jomillo H., II. *The School's Role in the Transition from Education to Work: Current Conditions and Future Prospects*. Baltimore, MD: Center for Social Organization of Schools, The Johns Hopkins University, 1986.

A report that examines the role of schools at four critical stages in students' transition to work—the career preparation stage, the job candidate stage, the job entry stage, and the job promotion or job shift stage. The report links data about jobs from a nationally representative sample of 4078 employers with National Longitudinal Survey data about the school experiences of young adults who held those jobs. (37 pp.)

Methods and Materials for Teaching Occupational Survival Skills. Macomb, IL: Curriculum Publications Clearinghouse, Western Illinois University, 1978.

A publication that includes information on the skills workers need to maintain themselves in occupations once they are employed. The 14 performance-based instructional modules in this curriculum guide focus on 3 general categories of necessary on-the-job skills: human relations skills, including communication skills; organization skills; and coping skills. Role playing, case studies, games, group discussion, and self-examination activities are among the teaching strategies suggested. Student worksheet and transparency masters, a list of teacher resources, and a multiple-choice student test are included for each module.

Miguel, Richard J. (ed.). *Education and Employment: Where We Are and Where We Ought to Go*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1985.

A report of the Annual Policy Forum Proceedings that focuses on the relationship between schooling and employment. Specifically, it examines research findings on (1) what employers are looking for in employees, (2) employers' priorities in making hiring decisions, and (3) education and training on the job. Throughout this forum, the focus was on the relationship of these three areas of employment to educational policies and practices. (82 pp.)

Miguel, Richard J., and Foulk, Robert C. *Youth's Perceptions of Employer Standards: Effects on Employment Outcomes and Employer Evaluations*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1984.

Part of a larger research program on youth employability that simultaneously examines the relationship between demand and supply variables. The Employability Factors Study specifically focuses on youth's perceptions of employer hiring and job performance standards; determinants of youth's perceptions, changes in youth's perceptions resulting from participation in education, training, and work experiences; and relationships of youth's perceptions to employment outcomes one year after high school graduation. (Executive Summary, 29 pp., Technical Report, 236 pp.)

Miguel, Richard J. *Developing Skills for Occupational Transferability: Insights Gained from Current Practice*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1977.

A report on 14 site visits to business, industry, and educational institutions regarding programs for enhancing individual potential for coping with career change. The programs were selected because they focus on job skills and preparation for career change. Five types of skill development for occupationally transferability are discussed: task performance skills common to occupations, skills for applying broadly usable knowledge, personal and interpersonal effectiveness skills, self-analysis skills, and career management and productivity skills. (49 pp.)

Miguel, Richard J. *Youth's Perceptions of Employer Hiring and Disciplinary Standards*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1982.

A study focusing on perceptions of worker attributes that youth need in order to get and keep jobs. The determinants of youth's perceptions, how those perceptions relate to their supervisors' reports of hiring and disciplinary standards, and how youth's perceptions change as a result of education, training, and work experiences are examined. Ultimately, interest is in understanding better how youth's perceptions of desired worker attributes relate to employment outcomes. (Executive Report, 41 pp.; Research Report, 215.)

Nickel, Phyllis Smith, and Delany, Holly. *Working with Teen Parents: A Survey of Promising Approaches*. Chicago: Family Focus and Family Resource Coalition, 1985.

A handbook that reviews the problems and potential solutions for sexually active, pregnant, and parenting teens. The handbook reviews the resources, structure, and commitment needed to make a successful program. (140 pp.)

Picou, J. Steven. *Vocational Education for Migrant Youth*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1992.

A paper whose purpose is to assist vocational educators in meeting the career development needs and aspirations of migrant youth. The paper examines the unique characteristics of migrant youth and develops a general life-cycle model of their vocational development. This comparative analysis provides the vocational educator with a basis for identifying programmatic efforts to enhance the career achievements of this special population. This paper addresses crucial issues that must be resolved through basic and applied research before migrant youth can effectively enter a broader labor market. These issues include the handicapping effects of poverty, geographical mobility, ethnicity, and language barriers as they

impact upon the vocational development of migrant youth. Other important concerns considered here are the educational, psychological, and physical problems unique to migrant youth and their forced entry into agriculture labor (29 pp.)

Pratzner, Frank C. *Occupational Adaptability and Transferable Skills*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1978

Report of a project to review literature regarding occupational adaptability and transferable skills. The report concludes that all skills are potentially transferable, and there is not a single set of skills that is readily identifiable as being the most transferable. Having transferable skills does not guarantee success in the labor market but should facilitate it. Teachers can teach for transfer by helping students learn the wide applicability of the skills they are learning. (91 pp.)

"Prepare Exceptional Students for Employability." Module L-12, the Performance-Based Teacher Education module series developed by the National Center for Research in Vocational Education, The Ohio State University. Athens, GA: American Association for Vocational Instructional Materials, University of Georgia, 1983.

A competency-based module to help teachers prepare exceptional students for employability, including promoting employment opportunities and identifying employability needs. (40 pp.)

Program Evaluation in the Experience-Based Career Education Handbook series. Portland, OR: Northwest Regional Educational Laboratory, 1976.

One of five handbooks that detail how to set up and operate an experience-based career education program. This volume describes program evaluation, why it is important, who should be involved, and who should do it. Included are step-by-step instructions on how to do program evaluation. (165 pp.)

"Provide for Employability Skill Development." Module C-8, the Competency-Based Career Guidance Modules series developed by the National Center for Research in Vocational Education, The Ohio State University. Wooster, OH: Bell & Howell Publication Products, 1985.

A competency-based module to help career guidance personnel develop objectives, strategies, and activities to assist students in developing employability skills (72 pp.)

Reubens, Beatrice. *From School to Work: A European Perspective*. Columbus: ERIC Clearinghouse on Adult, Career, and Vocational Education and The National Center for Research in Vocational Education, The Ohio State University, 1981.

A survey of school-to-work transition issues as they have developed in Europe. This paper contains discussion of the activities, research, and programs of each of four important international organizations, with particular stress on the period after 1975. These organizations are the European Community, the Organization for Economic Cooperation and Development, the Council of Europe, and the Nordic Council. Topics examined variously under the four organizations include defining the transition from school to work, difficulties in the transition, proposed transition programs, linked work and training, education for sixteen- to nineteen-year-olds, preventive work in the school system, compulsory education, upper secondary education, higher education, new studies, and objectives of preparation for work. (39 pp.)

Selz, Nina. *The Teaching of Employability Skills: Who's Responsible?* Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1980.

A report based on a national survey of adults, teachers, employers, and students. Discussed are the competencies necessary to obtain, keep, and advance in a job; where these competencies are learned; and where they should be learned. (35 pp.)

Selz, Nina A., Jones, Joan Simon, and Ashley, William L. *Functional Competencies for Adapting to the World of Work*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1980.

A report based on a national sample of adults. It focuses on whether competencies should be learned at home, at school, on the job, or self-taught, and discusses how important these competencies are in successful work and life activities. (58 pp.)

Smith, R. C. *Institutionalizing the School-to-Work Transition*. Chapel Hill, NC: MDC, Inc., 1983

A report that examines the issue of "school-to-work" historically, beginning with the Smith-Hughes Act of 1917; and then moves on to examine contemporary school-to-work programs on the cutting edge of the institutionalization process. Drawing on MDC's 16 years of experience in monitoring and analyzing such programs and operating pre-vocational training demonstrations, the report points up best practices, with special reference to various Jobs for America's Graduates programs nationally and to Partnership Project programs offered currently in Richmond, Virginia and Boston, Massachusetts. The report concludes that an incentive-based, partnership-based, locally operated, federally funded effort to stimulate the school-to-work process makes sense wherever the ground can be prepared for it. It suggests that the process will inevitably be a slow one and one that cannot be speeded up artificially by an influx of federal dollars without threatening the quality of the programs. Finally, it would be hard to imagine a better time for such a national initiative. (55 pp.)

Student Services in the Experience-Based Career Education Handbook Series. Portland, OR: Northwest Regional Educational Laboratory, 1978.

One of five handbooks which detail how to set up and operate an experience based career education program. This volume includes information on how to provide services for student program entry and student records, and guidance. (368 pp.)

Sum, Andy; Amico, Lorraine; and Harrington, Paul. *Cracking the Labor Market for Human Resource Planning*. Washington, DC: National Governor's Association, Center for Policy Research and Analysis, 1986.

This publication is designed to increase the skills and knowledge of practicing human resource staff, private sector decision-makers, and university students preparing for careers in the human resources field regarding the use of labor market and occupational information for policymaking and planning. The expectation is that improved decision making will result and increase the effectiveness of existing programs in solving the nation's unemployment and poverty problems. The appendix contains case study materials designed to allow states to independently tailor and adjust the local area planning scenario to their own needs, and where appropriate insert state specific data into the tables and exercises. (290 pp.)

Taking Charge. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1982.

Instructor's guide, student work books, and filmstrip with audio tape to help students identify their transferable skills that can be used in many career and life situations.

Target: Employment: A Resource Guide to Job Seeking and Job Retention Materials. Bloomington, IN: Vocational Education Services, Department of Adult and Occupational Education, Indiana University and the Indiana State Board of Vocational and Technical Education, 1983

A manual which serves as a resource guide for teachers' use in selecting quality materials to meet specific instructional needs for teaching employability skills. To assist the user in this task, the guide includes sections on five major components of employability skills. "Decision making" presents models and strategies for making informed, systematic decisions regarding the choice of a job or career. "Self-analysis" outlines procedures for identifying personal values, interests, aptitudes, skills, and knowledge of the working world. "Occupational analysis" summarizes procedures for investigating work and entry requirements for specific positions within occupational areas. "Job-seeking process" gives practical steps to be followed in the process of finding and getting a job. "Job retention" explains factors that affect survival on the job. Resources listed in each section of the handbook are fully described in an annotated bibliography organized by type of materials, learner resources, instructor guides, and professional resources. (277 pp.)

Time for Transition: Teenage Parents and Employment 1985. New York: National Child Labor Committee, 1985.

This is a report regarding teenage pregnancy and work. Topics explored in the study are a review of the efforts of social institutions to prepare teenage parents to support themselves, the issues involved in helping teenage parents achieve economic independence, and the policy implications of improving services for teenage parents. (33 pp.)

Vetter, Louise, Lowry, Cheryl Meredith, and Burkhardt, Carolyn. *Sugar and Spice is not the Answer: A Parent Handbook on the Career Implications of Sex Stereotyping.* Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1977

An illustrated, practical guide to helping children grow without sex stereotyping. Includes myths and realities, self-evaluation questions, and practical suggestions for combating sex stereotyping. Also includes an annotated bibliography. (54 pp.)

Wehman, Paul, and Hill, Janet W. (ed.). *Competitive Employment for Persons with Mental Retardation: From Research to Practice.* (Vol. 1). Richmond, VA: Rehabilitation Research and Training Center, School of Education, Virginia Commonwealth University, 1985.

A selection of twenty-one papers on the topics of employment of individuals with mental retardation, school-to-work transitions, parent involvement, and behavioral training strategies. (427 pp.)

Wieler, Geri Elisabeth. *Working on Working.* Produced by the Office of Radio and Television for Learning, WGBH, Boston. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1979.

This set of resources is comprised of a film and a book either of which can be used alone. The film, which focuses on exemplary programs in Georgia, is a good "jumping off point" for discussing and exploring the potential of vocational education for handicapped students. A discussion guide is included (30 minutes, color). The book describes several exemplary vocational programs for special needs students through first person accounts given by the innovators themselves. An annotated bibliography lists related resources (90 pp.). The film is available from National Audio Visual Center (GSA), Washington, DC 20409-0001.

Wiant, Allen A. *Transferable Skills. The Employer's Viewpoint*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1977.

Nine conferences across the country were held regarding transferable skills. The report gives the conclusions of the conferences regarding identifying transferable skills, their importance in hiring decisions, implications for education, and other uses. (37 pp.)

Working. New York, NY: Metropolitan Life and the New York City Board of Education, no date

A kit containing a video (approximately 15 minutes), student brochures (16 pp.), and a Handbook for Instructors (67 pp.). The video features celebrities discussing job seeking and keeping strategies. It is motivational and depicts young people of various races and both sexes in positive, non-stereotyped roles.

Youth Employability: Monographs on Research and Policy Studies. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1980.

A book containing four monographs on the subject of youth employability. The monographs were selected by a panel of experts as winners in a national competition. Titles of the four monographs are: Job Skills and Youth Unemployment: Analysis and Implications, Employer Involvement: A Study of Public and Private Sector Linkages to Youth Programs, Improving the Labor Exchange Process: A Focus on Youth; and The Counseling Needs of Migrant Adolescents in Vocational Training Programs. (124 pp.)

Career Assessment and Planning

"Assess the Progress of Exceptional Students." Module L-9, the Performance-Based Teacher Education module series developed by the National Center for Research in Vocational Education, The Ohio State University. Athens, GA: American Association for Vocational Instructional Materials, The University of Georgia, 1984

A competency-based module to assist vocational educators in developing the skills required to assess the progress of exceptional students. (36 pp.)

"Assess Student Performance: Attitudes." 2nd ed., module D-3, the Performance-Based Teacher Education module series developed by the National Center for Research in Vocational Education, The Ohio State University. Athens, GA: American Association for Vocational Instructional Materials, The University of Georgia, 1984.

A competency-based module for vocational educators to develop the skills required for assessing student attitudes. (32 pp.)

"Assess Student Performance: Knowledge." 2nd ed., module D-2, the Performance-Based Teacher Education series developed by the National Center for Research in Vocational Education, The Ohio State University. Athens, GA: American Association for Vocational Instructional Materials, The University of Georgia, 1984.

A competency-based module for vocational educators to develop the skills required for assessing their students' cognitive performance. (68 pp.)

"Assess Student Performance: Skills." 2nd ed, module D-4, the Performance-Based Teacher Education module series developed by the National Center for Research in Vocational Education, The Ohio State University. Athens, GA: American Association for Vocational Instructional Materials, The University of Georgia, 1983.

A competency-based module for vocational educators to develop the skills required for assessing their students' skills. (28 pp.)

"Assist Exceptional Students in Developing Career Planning Skills." Module L-11, the Performance-Based Teacher Education module series developed by the National Center for Research in Vocational Education, The Ohio State University. Athens, GA: American Association for Vocational Instructional Materials, The University of Georgia, 1983.

A competency-based module to assist vocational educators in developing the knowledge and skills necessary to help students with exceptional needs develop career planning skills. (40 pp.)

"Build a Guidance Program Planning Model." Module A-5, the Competency-Based Career Guidance module series developed by the National Center for Research in Vocational Education, The Ohio State University. Wooster, OH: Bell & Howell Publication Products, 1985.

A competency-based module to help career guidance personnel choose a program development model. The conceptual framework for planning, supporting, implementing, operating, and evaluating a career guidance program is explained. (104 pp.)

Bush, Andrew J.; Benson, Arland N., and Drier, Harry N. *Career Development Needs Assessment. A Procedural Guide for Assessing Career Development Needs of Individuals and Groups of Individuals in a School and Community Setting*, the Rural America series Career Guidance Counseling, Placement, and Follow-through Program for Rural Schools. Madison: Wisconsin Vocational Studies Center, University of Wisconsin-Madison, 1977.

A guidebook covering the issues in and guidelines for conducting a needs assessment. Topics included are identifying important groups to involve, determining and ranking career guidance goals, developing specific career guidance subgoals, measuring student performance, comparing goals and performance, and determining and prioritizing discrepancies. Appendices include examples of questionnaires, letters, and forms to be used in a needs assessment. (143 pp.)

Career Planning Support System. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1980.

A set of books making up a comprehensive program management system to improve high school career guidance programs. Provides step-by-step directions for planning, developing, implementing, and evaluating career guidance programs.

Career Planning System (CPS)—Microcomputer Version. Developed by The National Center for Research in Vocational Education, The Ohio State University. Omro, WI: The Conover Company, 1983.

An individualized instruction package consisting of 31 floppy disks, student guides, and an instructor's guide. The package provides career exploration and planning that involve students in planning their own career-related studies. Formats are available for regular and special education students.

"Conduct Computerized Guidance." Module C-3, the Competency-Based Career Guidance module series developed by the National Center for Research in Vocational Education, The Ohio State University. Wooster, OH: Bell & Howell Publication Products, 1985.

A competency-based module to help career guidance personnel plan, choose, and implement a computer-assisted guidance system based on local needs and resources. (44 pp.)

"Counsel Exceptional Students with Personal-Social Problems." Module L-10, the Performance-Based Teacher Education module series developed by the National Center for Research in Vocational Education, The Ohio State University. Athens, GA: American Association for Vocational Instructional Materials, The University of Georgia, 1984.

A competency-based module to assist vocational educators in developing knowledge of the important considerations and techniques involved in counseling students with exceptional needs who have personal-social problems. (36 pp.)

"Create and Use an Individual Career Development Plan." Module B-1, the Competency-Based Career Guidance module series developed by the National Center for Research in Vocational Education, The Ohio State University. Wooster, OH: Bell & Howell Publication Products, 1985.

A competency-based module to assist career guidance personnel in helping students develop and use individual career development plans. (48 pp.)

"Determine Client and Environmental Needs." Module A-6, the Competency-Based Career Guidance module series developed by the National Center for Research in Vocational Education, The Ohio State University. Wooster, OH: Bell & Howell Publication Products, 1985.

A competency-based module to help career guidance personnel assess the needs of their clients as well as the environmental factors influencing those needs. (60 pp.)

"Determine Needs and Interests of Students." Module B-1, the Performance-Based Teacher Education module series developed by the National Center for Research in Vocational Education, The Ohio State University. Athens, GA: American Association for Vocational Instructional Materials, The University of Georgia, 1977.

A competency-based module designed to assist teachers in determining the needs and interests of their students. Included is information on how to assess the social, emotional, and educational needs and the personal, school-related, and occupational interests of students (64 pp.)

"Develop a Work Experience Program." Module C-7, the Competency-Based Career Guidance module series developed by the National Center for Research in Vocational Education, The Ohio State University. Wooster, OH: Bell & Howell Publication Products, 1985.

A competency-based module to help career guidance personnel develop the knowledge and skill to assist students in acquiring work experience. (48 pp.)

Employability Development Plans: Counseling Participants and Developing EDPs: An Action Planning Guidebook. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1981.

A guidebook that describes a unified approach to EDPs for participants, counselors, and others in employment and training programs. The importance of a team approach to improving the employability of program participants is emphasized. (39 pp.)

"Enhance Understanding of Individuals with Disabilities." Module C-14, the Competency-Based Career Guidance module series developed by the National Center for Research in Vocational Education, The Ohio State University. Wooster, OH: Bell & Howell Publication Products, 1985.

A competency-based module to help career guidance personnel identify attitudes, negative assumptions, and other barriers faced by persons with disabilities, understand the adjustment process of someone who becomes disabled, and develop communications strategies that are useful in meeting the needs of the disabled (72 pp.)

Foster, June C. *Guidance, Counseling and Support Services for High School Students with Physical Disabilities.* Cambridge, MA: Technical Education Research Centers, 1978

A manual with a practical approach to the resources, procedures, and issues critical to serving students with handicapping conditions. The manual consists of two parts. Part 1 (424 pp.) discusses vocational and academic support services as well as career and personal counseling and educational services. The following chapters give an idea of the many topics addressed: "An Overview of Physical Disabilities and Health Problems," "Coordinating the Delivery of Services," "Personal Adjustment," "Educational Planning," "Career Development and Guidance," "Vocational Assessment," "Psychometric Testing," "Job Placement," and

"Parent involvement." Part 2 (191 pp.) is a compilation of national and state resources—organizations and directories for all states.

"Gather Student Data through Personal Contacts." Module F-2, the Performance-Based Teacher Education module series developed by the National Center for Research in Vocational Education, The Ohio State University Athens, GA: American Association for Vocational Instructional Materials, The University of Georgia, 1977

A competency-based module to help teachers develop the knowledge and skill to learn more about their students through personal contact with other teachers, counselors, parents, and the students. (36 pp.)

"Gather Student Data Using Formal Data-Collection Techniques." Module F-1, the Performance-Based Teacher Education module series developed by the National Center for Research in Vocational Education, The Ohio State University Athens, GA: American Association for Vocational Instructional Materials, The University of Georgia, 1977.

A competency-based module to help teachers develop the knowledge and skills to use cumulative records, anecdotal records, sociograms, student autobiographies, and standardized tests to gather and use information about students. (48 pp.)

Getzel, Elizabeth, and Tindall, Lloyd. *Strategies for Developing a Coordinated Vocational Assessment Process for Youth*. Madison, WI: Vocational Studies Center, Publications Unit, 1983.

A report that presents strategies for joint delivery of assessment services for disadvantaged youth, stressing the role of the Local Management Forums (LMFs). LMF's are composed of representatives from major service agencies and schools, and they develop policies and utilize resources to provide enhanced services to youth. The report discusses the role of vocational assessment in JTPA programs, the role of state-level staff, and planning considerations. Seven stages for the joint delivery of assessment services are described: determining the purpose, identifying resources, deciding who will be assessed, defining what to assess, deciding how to assess, developing a plan for implementing a coordinating process, and evaluating the plan. (132 pp.)

Handbook for Exploring Career Areas, developed by Appalachia Educational Laboratory, Inc Peoria, IL: Bennett & McKnight Publishing Co., 1985.

A handbook (96 pp.) describing the twelve career interest areas developed by the U.S. Department of Labor. Other materials developed by AEL for use with the handbook include filmstrips/cassettes describing the twelve career interest areas, a Career Area Interest Checklist, Individualized Educational Planning Unit, and Career Resource Filmstrip/Cassettes.

Harmon, Lenore W. *Using Information in Career Development: From Cognitions to Computers*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1983.

This report, a compilation of three papers, reviews cognitive-behavioral theories and career decision-making models and applies them to computer-based guidance systems. The report also examines processes that people use to organize information in order to make vocational decisions.

Hartz, John D., and Kosmo, Susan J. *An Individualized Approach to Career Counseling and Career Placement*, the Rural America Series: Career Guidance Counseling, Placement, and Follow-through Program for Rural Schools. Madison. Wisconsin Vocational Studies Center, University of Wisconsin-Madison, 1977.

A guidebook that describes the process and components of career counseling and placement in rural and small schools. The topics include career education, an individualized approach to career counseling, an overview of a career counseling program, the placement process, how to maximize placement opportunities, and a model for comprehensive career placement. (42 pp.)

Hartz, John D. and Kosmo, Susan J. *Career Counseling in the Rural Schools*, the Rural America Series: Career Guidance, Counseling, Placement, and Follow-through Programs for Rural Schools. Madison: Wisconsin Vocational Studies Center, University of Wisconsin, 1977.

A manual that provides a basic rationale for career counseling and a down-to-earth program for its accomplishment in rural school systems. Five sections describing practical services counselors can give students are included. individual inventory, counseling interview service, information services, coordination and referral, and evaluation and follow-up. (262 pp.)

"Help Ethnic Minorities with Career Guidance." Module C-15, the Competency-Based Career Guidance module series developed by the National Center for Research in Vocational Education, The Ohio State University. Wooster, OH: Bell & Howell Publication Products, 1985.

A competency-based module to help career guidance personnel identify and understand attitudes toward ethnic minorities and the effects of stereotyping, and develop action-oriented behaviors for improving relationships with them, career guidance materials specifically designed for them, and communications strategies for helping them. (68 pp.)

"Identify and Diagnose Exceptional Students." Module L-2, the Performance-Based Teacher Education module series developed by the National Center for Research in Vocational Education, The Ohio State University. Athens, GA: American Association for Vocational Instructional Materials, The University of Georgia, 1982.

A competency-based module to help teachers develop the knowledge and skills to identify special/exceptional students. The module covers what should be diagnosed, diagnostic techniques, and interpreting diagnostic information.. (48 pp.)

"Identify and Plan for Guidance Program Change." Module A-1, the Competency-Based Career Guidance module series developed by the National Center for Research in Vocational Education, The Ohio State University. Wooster, OH: Bell & Howell Publication Products, 1985.

A competency-based module to help career guidance personnel decide what changes, if any, need to be made in their current career guidance programs and outline the steps necessary to implement those changes. (52 pp.)

Individualized Education Program (IEPs): A Filmstrip/Audio Tape for Vocational Educators. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1980.

A filmstrip/audio tape designed especially for use with handicapped students that suggests ways of adapting teaching methods to IEPs. It can be used separately or with Phelps and Batcheler's *Individualized Education Programs (IEPs): A Handbook for Vocational Educators*

Krumboltz, John D. *Private Rules in Career Decision Making*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1983.

This report explores how the private, often irrational, rules people hold affect the way they make career decisions. It will help counselors and teachers working with students identify how the students' irrational beliefs may affect career decisions. (33 pp.)

McKinney, Lorella A., and Seay, Donna M. *Development of Individualized Education Programs (IEPs) for the Handicapped in Vocational Education*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1979.

A guidebook that discusses the elements of an IEP, procedures for identifying individual needs, observation and testing for diagnosing, prescribing vocational education in an IEP, completing and implementing an IEP, and critical issues and problems related to IEPs. (60 pp.)

Pendergrass, John; Carter, Nancy; and Douglas, Marcia. *Idea Book: Meeting the Occupational Information Needs of Disadvantaged Youth*. Portland, OR: Northwest Regional Educational Laboratory, 1981.

A book that presents innovative ways to provide occupational information to out-of-school youth. A variety of approaches to outreach, awareness, assessment, and occupational information services are suggested. Models that can be adapted to fit the needs of various programs and clients are presented. (56 pp.)

Phelps, L. Allen, and Batchelor, Laurie J. *Individualized Education Programs (IEPs): A Handbook for Vocational Educators*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1979.

A handbook that provides a brief overview of IEP requirements and procedures and describes the role vocational educators can play in formulating and implementing IEPs. (48 pp.)

"Provide Career Guidance to Girls and Women." Module C-13, the Competency-Based Career Guidance module series developed by the National Center for Research in Vocational Education, The Ohio State University. Wooster, OH: Bell & Howell Publication Products, 1985.

A competency-based module to help career guidance personnel recognize stereotypes and misconceptions about girls and women, judge the gender fairness of published career information, develop strategies for career exploration for women and girls, and identify ways in which a career guidance program might not be complying with federal sex-equity legislation. (76 pp.)

"Provide Information on Educational and Career Opportunities." Module F-4, the Performance-Based Teacher Education module series developed by the National Center for Research in Vocational Education, The Ohio State University. Athens, GA: American Association for Vocational Instructional Materials, University of Georgia, 1977.

A competency-based module to help teachers, counselors and other school personnel learn how to develop and disseminate information on educational and career opportunities. (40 pp.)

Sarkees, Michelle Donnelly, and Scott, John T. *Vocational Special Needs*. 2d ed Alsip, IL American Technical Publishers, Inc., 1985.

A book containing 12 modules that can be used independently or together. Topics covered include special needs learners; referral, identification, and placement of special needs learners; vocational assessment of special needs learners; individualized education programs for special needs learners; interagency collaboration and cooperative planning; applying rehabilitative technology to vocational programs; facilities, and equipment; curriculum modification for special needs learners; instructional techniques for special needs learners, learner evaluation and grading procedures; integrating special needs learners into vocational student organizations; transitions; job placement; and follow-up for special needs learners (433 pp.)

Testing in Employment and Training Programs: An Action Planning Guidebook. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1983.

A guidebook that specifies eight tasks in planning and implementing a testing and assessment program. Included are abstracts of 74 test instruments. (144 pp)

Unlocking Nontraditional Careers. Columbus The National Center for Research in Vocational Education, The Ohio State University, 1982.

A set of four sex equity training packages. "Communication Skills," "Enhancing Placement," "Parent Awareness," and "Recruitment Skills," can be used separately or in combination. Each package includes a training outline, handouts, transparency originals, and a teacher's guide

"Use Conferences to Help Meet Student Needs." Module F-3, the Performance-Based Teacher Education module series developed by the National Center for Research in Vocational Education, The Ohio State University. Athens, GA: American Association for Vocational Instructional Materials, The University of Georgia, 1977.

A competency-based module to assist teachers in developing the knowledge and skills required to conduct successful conferences with students to help meet the students' personal, educational, and vocational needs. (40 pp.)

Using Labor Market Information in Career Exploration and Decision Making: A Resource Guide. Garrett Park, MD: Garrett Park Press, 1986.

A resource guide developed at the National Center for Research in Vocational Education that links career development theory, labor market concepts, occupational information resources, career counseling practices, and professional development plans. The book is designed as a primary or supplementary text for a college course in career information for counselors-in-training. It can also be used as a reference guide for teachers and counselors or as a resource in professional development workshops or seminars. The major topics covered are theories of career development; basic labor market supply-demand concepts; major federal, state, and local sources of career information; federal labor market information sources and how they can be used; and sources of local career information. Includes case studies showing labor market information integrated into career counseling (282 pp.)

Winkfield, Patricia W., Whitson, Karen S., and Ripple, Gary. *Bridges to Employment. Recruitment and Counseling Practices for Disadvantaged, Unemployed, Out-of-School Youth in Vocational Programs—Book 1*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1980

Designed to aid program administrators, teachers, counselors, and student personnel coordinators in recruiting, counseling, and improving vocational programs for disadvantaged youth. (61 pp.)

School-Community Involvement

Bhaerman, Robert D. *Career Education: Collaboration with the Private Sector*. Columbus. The National Center for Research in Vocational Education, The Ohio State University, 1982

A paper that reviews three aspects of career education-private sector collaboration. (1) the general and specific approaches that have been utilized during the past 10 years by the career education movement and the private sector in developing career education collaboration in the private sector; (2) the major results of these activities, focusing on the advantages of as well as the problems with collaboration; and (3) suggested guidelines under which future positive collaboration might occur. (67 pp.)

Campbell-Thrane, Lucille, and Jahnke, Jessica Jo. *Building Partnerships: CBO's . . . CETA . . . VOCED*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1981.

A report based on visits to a number of community-based organizations (CBO's) in several states. CBO's are described from several perspectives: an historical perspective of their origins, in relation to CETA Manpower Policy; barriers and coordination among and between CBO's and vocational education; and the capabilities of CBO's to serve people preparing for the world of work. (28 op.)

"Collaborate with the Community." Module A-3, The Competency-Based Career Guidance module series developed by the National Center for Research in Vocational Education, The Ohio State University, Wooster, OH: Bell & Howell Publication Products, 1985.

A competency-based module to help career guidance personnel increase their knowledge and skill in linking community-based comprehensive career guidance programs with education and employment initiatives to assist youth and adults. (92 pp.)

Connection, Volume I: School to Work, A Planning Manual for Education and Business People. New York. Vocational Foundation, Inc., 1982

A manual that reviews 55 programs successfully providing education-business linkages. The intent is to encourage school-business partnerships to make education more productive, improve employment access, and expand career options for youth, particularly minority and economically disadvantaged students. (93 pp.)

"Cooperate with Governmental and Community Agencies" Module LT-F-4, the Competency Based Vocational Education Administrator module series developed by the National Center for Research in Vocational Education, The Ohio State University, Athens GA: American Association for Vocational Instructional Materials, The University of Georgia, 1983.

A competency-based module to help educational administrators develop the knowledge and skills to influence public policy and laws regarding education. (85 pp.)

"Develop a Linkage Plan." Module LT-J-1, the Competency-Based Vocational Education Administrator module series developed by the National Center for Research in Vocational Education, The Ohio State University, Athens, GA: American Association for Vocational Instructional Materials, The University of Georgia, 1984.

A competency-based module for vocational education administrators to learn the rationale for linkage and a method for developing a plan to establish linkages in the community. (54 pp.)

Employer/Community Resources, in the Experience Based Career Education Handbook series. Portland, OR: Northwest Regional Educational Laboratory, 1976.

One of five handbooks detailing how to set up and operate an experience-based career education program. This volume includes sections on site recruitment, employer instructor development, and site utilization. (303 pp.)

"Establish Linkages with BIL/GM." Module LT-J-2, the Competency-Based Vocational Education Administrator module series developed by the National Center for Research in Vocational Education, The Ohio State University. Athens, GA: American Association for Vocational Instructional Materials, The University of Georgia, 1984.

A competency-based module to help vocational education administrators develop a plan for building linkages with business, industry, labor, the government, and the military. (80 pp.)

Ferrini, Paul. *The Interdependent Community: Collaborative Planning for Handicapped Youth*. Cambridge, MA: Technical Education Research Centers, 1980.

A guidebook describing an interagency collaborative planning process for improving career-related opportunities for handicapped high-school-age youth. The intended outcome is a detailed plan devised by members of four sectors of the community—public schools, government agencies, handicapped service organizations, and business and industry--and supported by the community, parents, and employers. The collaborative planning process is presented in three stages that can be readily adapted to any subject or program area: moving from a general theme to a specific focus, choosing one strategy to initiate your program, and developing an action plan. Included are basic information and planning exercises, detailed rationales and instructions for team leaders, the results of a national survey of the perceptions of collaborative efforts by agencies involved in collaborative planning, and a listing of selected resources. (112 pp.)

Franchak, Stephen J.; Desy, Jeanne; and Norton, E. Lee. *Involving Business-Industry-Labor: Guidelines for Planning and Evaluating Vocational Education Programs*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1984.

A report that explores exemplary collaborative programs at seven community colleges, reviews case studies, and identifies national organizations and alliances that support economic development activities. (86 pp.)

A Guide to Linkage in Action: Selected Models. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1984.

A guidebook that is one of six documents comprising the Linker's Tool Kit. The other documents of the series are two brochures, *Linkage Is . . . A Guide for Board Members* and *Linkage Is . . . A Guide for BIL/GM*; and three competency-based modules, *Develop a Linkage Plan*, Module LT-J-1 (54pp.); *Establish Linkage with BIL/GM*, Module LT-J-2 (80 pp.); and *Provide Customized Training Programs for BIL/GM*, Module LT-J-3 (87 pp.). This document is an overview of the variety of ways in which educational institutions can successfully and productively link with business, industry, labor, government, and the military. (46 pp.)

"Involve the Community in Vocational Education " Module LT-F-3, the Competency-Based Vocational Education Administrator module series developed by the National Center for Research in Vocational Education, The Ohio State University Athens, GA: American Association for Vocational Instructional Materials, The University of Georgia, 1983.

A competency-based module to help vocational education administrators develop and implement a plan for increased community involvement with their program (73 pp.)

Long, James P.; Warmbrod, Catherine P ; Faddis, Constance R., and Lerner, Max J. *Avenues for Articulation: Coordinating Secondary and Postsecondary Programs*. Columbus. The National Center for Research in Vocational Education, The Ohio State University, 1986.

A guidebook that addresses the critical elements of successful secondary-postsecondary occupational articulation efforts already underway. It also reviews the kinds of problems such programs encounter and offers potential solutions. Finally, it examines some related kinds of arrangements that may help pave the way toward workable secondary-postsecondary curriculum coordination. The guidebook should be valuable to all persons interested in initiating or improving their own articulation efforts: educational policymakers, administrators at the state and local levels, advisory committees, program directors, and occupational program instructors, as well as employers and other interested parties. (98 pp.)

Maurice, Clyde F. *Private Sector Involvement with the Vocational Community: An Analysis of Policy Options*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1984.

A report that provides an analysis of policy options in vocational education/private sector cooperation. It is intended for federal policy makers and state and local personnel concerned with strengthening the ties between vocational education and the private sector. (106 pp.)

Miller, Juliet V. *The Family-Career Connection: A New Framework for Career Development*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1984.

A report that charts emerging trends in the career roles of women, child care, and the household roles of men, and discusses the effects of parental employment on children. It provides examples and recommendations for program development. (49 pp.)

Norton, Robert E., and Belcher, James O. *A Guide to Linkages between Vocational Education and Organized Labor in the United States*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1984.

A report in which 23 categories of linkage activities are explained, with program descriptions in each category. Twenty-one programs are highlighted as exemplary. (162 pp.)

"Provide Customized Training Programs for BIL/GM." Module LT-J-3, the Competency-Based Vocational Education Administrator module series developed by the National Center for Research in Vocational Education, The Ohio State University. Athens, GA: American Association for Vocational Instructional Materials, University of Georgia, 1984.

A competency-based module to help vocational education administrators learn about the variables involved in providing customized training programs for business, industry, labor, the government, and the military. (87 pp.)

Reconnecting Youth: The Next Stage of Reform Denver Business Advisory Commission of the Education Commission of the States, 1985

A report addressing the problems of disconnected youth. The problem and potential solutions are explored. Linkages among business, education, labor, and policy leaders are advocated. (48 pp.)

Stein, Walter M.; Weaver, Charles E.; and Blank, Joan C. *Increasing Guidance Effectiveness through School-Community Cooperation: A Guide to Developing Cooperative Relationships Between Schools and Business, Industry, and Labor in Rural Communities*. Columbus. The National Center for Research in Vocational Education, The Ohio State University, 1978.

A guidebook for establishing cooperative agreements between schools and communities. The focus is on planning, implementation, and evaluation. Over 200 agreements used across the country are described. (581 pp.)

Tindall, Lloyd W. *Handbook on Developing Effective Linking Strategies: Vocational Education Models for Linking Agencies Serving the Handicapped*. Madison: Vocational Studies Center, University of Wisconsin-Madison, 1982.

A handbook that facilitates cooperation in meeting the vocational education and employment needs of students with handicapping conditions. The following topics are addressed: establishing and maintaining a local linkage committee, the role of the individualized education program (IEP) and individualized written rehabilitation plan (IWRP) in linkage agreements, developing local agreements, cost considerations in establishing and maintaining local interagency linkages, evaluation of local interagency linkages, and implementation of interagency agreements. The development and outcomes of interagency linkage models in Maryland, New Jersey, and Virginia are presented. (353 pp.)

"Work with Members of the Community." Module G-8, the Teacher Education module series developed by The National Center for Research in Vocational Education, The Ohio State University, Athens, GA: American Association for Vocational Instructional Materials, University of Georgia, 1978.

A competency-based module to help teachers develop the knowledge and skills to work with members of the community through locating contacts in the community, working with community organizations, cooperating in special community events, and developing contacts in business and industry. (32 pp.)

Placement

"Assist Students in Applying for Employment or Further Education." Module F-5, the Performance-Based Teacher Education module series developed by the National Center for Research in Vocational Education, The Ohio State University, Athens, GA; American Association for Vocational Instructional Materials, The University of Georgia, 1977.

A competency-based module to assist teachers in developing the skills necessary to help students learn how to apply for employment and further education. (56 pp.)

Barron, Connie. *Job Placement: Programs for the Future*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1982

A report that explores job placement programs through various state models and guidelines and organizational styles. Included are suggestions for improving programs and staff development. (29 pp.)

Bhaerman, Robert D.; Belcher, James O.; and Merz, Harold E. *A Helping Hand: A Guide to Customized Support Services for Special Populations*. Bloomington, IL: Meridian Education Corporation, 1986.

An overview of the issues surrounding placement and follow-through services for special populations. This guidebook is intended for vocational program administrators, instructors, counselors, and placement coordinators. It addresses defining the special populations, identifying the support services needed, and providing those services. Components of the services and related issues and problems are discussed. An extensive list of resource organizations is included. (172 pp.)

"Conduct Placement and Referral Program Activities." Module C-10, the Competency-Based Career Guidance module series developed by The National Center for Research in Vocational Education, The Ohio State University, Wooster, OH: Bell & Howell Publication Products, 1985.

A competency based module to help career guidance personnel establish and maintain a job placement/referral program that meets the needs of their clients. (68 pp.)

Drier, Harry N. *Programs of Career Guidance, Counseling, Placement, Follow-up, and Follow-through*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1977.

A career development content model for organizing, developing, and implementing future career guidance programs. This information analysis paper is intended for guidance counselors and directors, program planners, and vocational educators. The model addresses such issues as self, economic, societal, leisure and avocational, and attitude and value understandings necessary for life-role planning. (44 pp.)

Effective Placement Programs For Vocational and Technical Students. Westerville, Ohio: Council on Vocational Education, 1986

A study of effective placement programs, both secondary and postsecondary, in existence in Ohio at the time of publication. It is intended to identify the elements in these programs that contribute to their success. The report contains information on the backgrounds, philosophies, opinions, and practices of those who operate the placement services; the role of teachers and others beside placement personnel; and the priority different schools give to

placement. Various placement strategies are described including assessing the local employment market, assessing students' job aptitudes, preemployment learning activities, job placement, follow-up, and job development. Special efforts for groups such as drop-outs, adults, and handicapped students are reviewed. (33 pp.)

"Establish a Student Placement Service and Coordinate Follow-up Studies." (2d ed.) Module LT-C-4, the Competency-Based Vocational Education Administrator module series developed by the National Center for Research in Vocational Education, The Ohio State University. Athens, GA: American Association for Vocational Instructional Materials, The University of Georgia, 1984.

A competency-based module to help administrators develop the knowledge and skills to establish a student placement service and coordinate follow-up studies. Topics include how to plan, develop, and implement placement services and how to plan and conduct follow-up studies of placement effectiveness. (95 pp.)

Job Placement in Employment and Training Programs: An Action Planning Guidebook. Columbus: The National Center for Research in Vocational Education, 1983. Revised 1986

A guidebook that identifies tasks for improving job placement, job development, and the organization of training and placement councils. (121 pp.)

Johnson, Marion T.; Ho, Claire; and Shellberg, Ken. *Bridges to Employment: Practices for Job Development, Placement and Follow-through of Unemployed Youth for Vocational Education and Manpower Training—Book II*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1980.

A guidebook for local administrators, teachers and counselors. It focuses on developing guidelines and strategies for working with youth in vocational education and manpower training programs. (133 pp.)

Johnson, Miriam, and Roberts, David. *Getting Youth on the Job Track: A Description and Evaluation of a Job Search Training Program*. Salt Lake City: Olympus Research Centers, 1982

The fourth volume in a series on the topic of youth employment by the Olympus Research Centers. The payment of an expense allowance to young people who participate in a job search training program is analyzed in terms of its impact on participation, costs, and outcomes. (204 pp.)

Kosbab, George C. *Job Placement, Supervision, and Follow-up*. Columbus: Ohio Department of Education, Division of Vocational Education and the Ohio Agriculture Education Curriculum Materials Service, 1979.

A conference report based on workshops conducted across the state involving people from all the 102 vocational education planning districts. It is intended to encourage school districts to improve their job placement supervision and follow-up activities. Contained within this document are several of the major topics discussed at this job placement supervision and follow-up conference that can be useful in developing a team approach for appropriate job placement. This publication identifies some of the major activities that school districts and program operators must provide in order to maintain appropriate accountability and effective job placement services. (78 pp.)

Kosmo, Susan, and Hartz, John D. *Transitional Career Placement in the Rural School*, in the Rural America Series: Career Guidance Counseling, Placement, and Follow-through Program for Rural Schools. Madison: Wisconsin Vocational Studies Center, University of Wisconsin-Madison, 1977.

A guidebook for developing a placement program for a rural or small school. Topics addressed include identifying student needs, program resources, placement staff, and implementing the placement program. (134 pp.)

Lewis, Morgan V.; Fraser, Jeannette L.; Russell, Jill Frymier; and Orth, Mollie N. *Examining Secondary Vocational Programs with High and Low Training-Related Placement*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1982.

A research study that focused on the factors affecting the job placement rates of vocational education program leavers. Some factors considered are staff commitment to placement, assignment of responsibility for placement, frequency and nature of staff contacts with employers, admissions criteria, activity of youth organizations, cooperative programs for placement, and racial balance of staff compared to the community. (39 pp.)

McKinney, Floyd, Franchak, Stephen J., and Halasz, Ida M. *Increasing Job Placement Rates in Vocational Programs: Secondary and Postsecondary*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1984.

This report identifies labor market, community, and educational factors that influence the placement of students. It recommends ways to improve the placement rate. (24 pp.)

McKinney, Floyd L., Franchak, Stephen J., Halasz-Salster, Ida, Morrison, Irene, and McElwain, Douglas. *Factors Relating to the Job Placement of Former Secondary Vocational Education Students*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1981.

A research report which attempts: (1) to identify factors relating positively or negatively to job placement, (2) to provide detailed descriptions of the educational and community processes that appear to influence job placement, and (3) to generate hypotheses concerning variables relating to job placement. Data for the study came from a review of the literature, an analysis of existing data, case studies, and a mail questionnaire survey conducted in seven states. (412 pp.)

Novak, Jan L., and Hammerstrom, Wayne A. *Desk Reference: Techniques and Procedures for Facilitating Career Counseling and Placement* in the Rural America Series: Career Guidance Counseling, Placement, and Follow-through Program for Rural Schools. Madison: Wisconsin Vocational Studies Center, University of Wisconsin-Madison, 1977.

A desk reference for counselors, teachers, and placement specialists. Topics addressed include how to infuse occupational information into the classroom, how to get occupational and educational information, how to select the materials, how to organize the materials, and how to store them so they are easily accessible. (161 pp.)

Presenting Cooperative Education: A Guide for Providing Information about Cooperative Education and Recruiting Work Stations. New York: The National Child Labor Committee, 1983.

A guide that assists the teacher-coordinator in presenting cooperative education to employers and in developing appropriate workstations for students. It is composed of three

sections: presenting cooperative education to the community of employers in general, presenting the cooperative education story to employer groups in the public and private sectors, and presenting the cooperative education story to individual employers. Practical, step-by-step procedures are set out for each activity to ensure successful interactions with potential employers. Additional sources of information are included (41 pp.)

Self-Assessment Guidelines for Administrators of High School Cooperative Work Experience Programs. Revised ed. New York: National Child Labor Committee, 1986.

This is a self-assessment instrument designed to help teachers, coordinators, and administrators review, analyze, and improve cooperative work experience education (CWEE) programs. It will help provide information on which to base recommendations and develop plans to improve CWEE programs. The booklet may be reprinted locally (64 pp.)

Follow-Up and Follow-Through

Campbell, Robert E., Ho, Claire, King-Fitch, Catherine C.; and Shellberg, Kenneth L. *Follow-through Services: A Missing Link to Employment for the Disadvantaged*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1981

A research report focusing on follow-through services provided by employment and training programs for the disadvantaged. The study identified the degree to which programs support follow-through services and the facilitators and barriers to providing such services (70 pp.)

"Facilitate Follow-up and Follow-through." Module C-11, the Competency-Based Career Guidance module series developed by The National Center for Research in Vocational Education, Columbus, The Ohio State University, Wooster, OH. Bell & Howell Publication Products, 1985

A competency-based module to help career guidance personnel conduct a follow-up study of school leavers and ensure that follow-through assistance for students is provided (104 pp.)

Follow-Up and Follow-Through in Employment and Training Programs: An Action Planning Guidebook. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1983.

A guidebook that outlines the essential tasks in follow-up and follow-through activities and offers guidelines for completing each task. (184 pp.)

Franchak, Stephen J., and Spierer, Janet E. *Evaluation Handbook Volume 1: Guidelines and Practices for Follow-up Studies of Former Vocational Education Students*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1978.

A strongly user-oriented handbook that is more than a "cookbook." It contains information about legislation requirements, development of forms and instruments, sampling pros and cons, guides for interpreting data, and alternative methods of reporting. A bibliography of selected related materials and a glossary are also enclosed. Also, the handbook provides clarification of the content necessary for follow-up studies, guidelines for improving the technical aspects of follow-up, and information to increase efficiency and effectiveness of follow-up studies. (230 pp.)

Franchak, Stephen J., and Spierer, Janet E. *Evaluation Handbook Volume 2: Guidelines and Practices for Follow-up Studies of Special Populations*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1979.

A handbook designed to stimulate dialogue, change, and improvement in vocational education for special populations. It is specifically addressed to program administrators, evaluators, and other professionals engaged in this important work. This volume does not provide absolute answers for improving follow-up studies but it does identify current problems and issues along with existing practices that have proved successful. (273 pp.)

ADDITIONAL RESOURCES

Organizations and Associations

Appalachians

Appalachia Educational Laboratory, P.O. Box 1348, Charleston, WV 25325

Appalachian Regional Commission, 1666 Connecticut Avenue, NW, Washington, D.C. 20235.

Asian Americans

Asian American Legal Defense and Education Fund, 99 Hudson Street, 12th Floor, New York, NY 10013.

Chinese for Affirmative Action, 17 Walter U. Lum Place, San Francisco, CA 94108

China Institute in America, 125 E. 65th Street, New York, NY 10021

Department of Health & Human Services, Division of Asian American Affairs,
200 Independence Avenue, SW, Room 419E Hubert Humphrey Building, Washington, D.C.
20201.

Japanese American Citizens League, 1765 Sutter Street, San Francisco, CA 94115

National Association for Asian and Pacific American Education, 3621 Rue Mignon,
New Orleans, LA 70114.

Organization of Chinese Americans, 2025 Eye Street, NW, Suite No. 926, Washington,
D.C. 20006.

U.S. Coordinator for Refugee Affairs, Department of State, Room 7526, Washington,
D.C. 20520

Vietnam Foundation, 6713 Lumsden Street, McLean, VA 22101

Black Americans

Alpha Kappa Alpha, 5656 S. Stony Island Avenue, Chicago, IL 30637.

Alpha Phi Alpha, 4432 Martin Luther King Drive, Chicago, IL 60653

Delta Sigma Theta, 1707 New Hampshire Avenue, NW, Washington, D.C. 20009.

National Association for the Advancement of Colored People, 186 Remsen Street, Brooklyn, NY 11201.

National Urban League, 500 E 62nd Street, New York, NY 10021

Children/Family

The Children's Foundation, 1420 New York Avenue, NW, Suite 800, Washington, D.C 20005.

Child Welfare League of America, 67 Irving Place, New York, NY 10003.

Handicapped

American Coalition of Citizens with Disabilities, 1200 15th Street, NW, Suite 201, Washington, D.C. 20005

American Council of the Blind, 1211 Connecticut Avenue, NW, Suite 506, Washington, D.C. 20036.

American Deafness and Rehabilitation Association, 814 Thayer Avenue, Silver Spring, MD 20910.

American Speech-Language-Hearing Association, 10801 Rockville Pike, Rockville, MD 20852.

Arthritis Foundation, 1314 Spring Street, NW, Atlanta, GA 30309

Association for Children and Adults with Learning Disabilities, 4156 Library Road, Pittsburgh, PA 15234.

Association for Education and Rehabilitation of the Blind and Visually Handicapped, 206 W. Washington Street, Suite 320, Alexandria, VA 22314.

Association on Handicapped Student Services Programs in Postsecondary Education, P O Box 21192, Columbus, OH 43221

Better Hearing Institute, 1430 K Street, NW, Suite 700, Washington, D.C 20005.

The Council for Exceptional Children, 1920 Association Drive, Reston, VA 22091.

ERIC Clearinghouse for the Handicapped and Gifted, 1920 Association Drive, Reston, VA 22091.

Gallaudet College, Florida Avenue at Seventh Street, NE, Washington, D C. 20002

Goodwill Industries of America, 9200 Wisconsin Avenue, Bethesda, MD 20814

Helen Keller National Center for Deaf-Blind Youth & Adults, 111 Middle Neck Road, Sands Point, NY 11050.

Information Center for Individuals with Disabilities, 20 Park Plaza, Room 330, Boston, MA 02116.

National Association of the Deaf, 814 Thayer Avenue, Silver Spring, MD 20910

National Association for Deaf-Blind, 2703 Forest Oak Circle, Norman, OK 73071.

National Association for Visually Handicapped, 305 E. 24th Street, 17-C, New York, NY 10010

National Easter Seal Society, 2023 W. Ogden Avenue, Chicago, IL 60612.

National Information Center for Handicapped Children and Youth, Closer Look, Box 1492, Washington, D.C. 20013.

Parent Education Advocacy Center, 229 S. Pitt Street, Suite 300, Alexandria, VA 22314

The President's Committee on Employment of the Handicapped, Washington, D.C. 20210.

Stout Rehabilitation Research and Training Center, University of Wisconsin, Menomonie, WI 54751

Vision Foundation, Two Mt. Auburn Street, Watertown, MA 02172.

Hispanic

ASPIRA of America, 114 E. 28th Street, New York, NY 10016.

Chicano Training Center, 7145 Avenue H, Houston, TX 77011.

Mexican-American Legal Defense and Educational Fund (MALDEF), 28 Geary, San Francisco, CA 94108.

National Coalition of Hispanic Mental Health and Human Services Organization, 1030 15th Street, NW, Suite 1053, Washington, D.C. 20005.

National Council of La Raza, 20 F Street, 2nd Floor, Washington, D.C. 20001.

Hispanic Institute in the United States, 612 W. 116th Street, New York, NY 10027.

Hispanic Public Affairs Association, P.O. Box 5488, Friendship Heights Station, Washington, D.C. 20016.

Mexican-American Opportunity Foundation, 670 Monterey Pass Road, Monterey Park, CA 91754.

National Puerto Rican Forum, 450 Park Avenue, S., New York, NY 10016.

Limited English

Center for Applied Linguistics, 3520 Prospect, NW, Washington, D.C. 20009.

Chinese-English Translation Assistance Group, Box 400, Kensington, MD 20895.

Midwest Resource Center for Bilingual/Bicultural Education, Bilingual Education Service Center, 500 S. Dwyer Avenue, Arlington Heights, IL 60005.

National Association for Bilingual Education, 1201 16th Street, NW, Room 405, Washington, D.C. 20036

National Center for Research in Vocational Education, 1960 Kenny Road, Columbus, OH 43210.

National Clearinghouse for Bilingual Education, 1555 Wilson Boulevard, Suite 605, Rosslyn, VA 22209.

Teachers of English to Speakers of Other Languages, 202 D.C. Transit Building, Georgetown University, Washington, D.C. 20057.

Migrants

Center for the Study of Migrant and Indian Education, P.O. Box 329, Toppenish, WA 98948

East Coast Migrant Health Project, 1234 Massachusetts Avenue, NW, Room 623, Washington, D.C. 20005.

Migrant Division, Department of Labor, 601 D Street, NW, Room 314, Washington, D.C. 20213

Migrant Education Resource Center, 312 Third Street, S., Nampa, ID 83651

Migrant Education Service Center, 3000 Market Street, SW, Salem, OR 97301.

Migrant Legal Action Program, 806 15th Street, NW, Suite 600, Washington, D.C. 20005.

Workers' Defense League, 15 Union Square, New York, NY 10003.

Native Americans

Americans For Indian Opportunity, 1140 Connecticut Avenue, NW, Suite 301, Washington, D.C. 20036.

Bureau of Indian Affairs, 1951 Constitution Avenue, NW, Washington, D.C. 20245.

Bureau of Indian Affairs, Office of Indian Education Programs, Indian Education Resources Center, Box 1788, Albuquerque, NM 87103

Department of Higher Education, Navajo Division of Education, P.O. Drawer S, Window Rock, AZ 86516.

Illinois Indian Training and Employment Program, 1124 W. Granville, Chicago, IL 60660.

National Congress of American Indians, 804 D Street, NE, Washington, D.C. 20002.

National Indian Education Association, 1115 Second Avenue, S., Minneapolis, MN 55403.

National Indian Training and Research Center, 2121 S Mill Avenue, Suite 218, Tempe, AZ 85282.

National Indian Youth Council, 201 Hermose, NE, Albuquerque, NM 87108.

National Urban Indian Council, 2258 S. Broadway, Denver, CO 80210.

Native American Task Force for Vocational Education, 1626 High Street, Denver, CO 80218

North American Indian Association, 360 John R, Detroit, MI 48226

Office of Indian Opportunity Referral Center, 1410 E. 46th Street N, Tulsa, OK 74126.

United Indians of All Tribes Foundation, Daybreak Star Arts Center, Discovery Park, P O Box 99253, Seattle, WA 98199.

United Native Americans, 7787 Earl Ct., El Cerrito, CA 94530.

Rural

American Rural Health Association, 100 Seventeenth Street., NW, Washington, D C. 20036.

Farmers Home Administration, U.S. Department of Agriculture, Washington, D.C. 20250.

Housing Assistance Council, 1025 Vermont Avenue, NW, Suite 606, Washington, D C 20005

Office of Fair Housing and Equal Opportunity, Housing and Urban Development, Washington, D.C. 20410.

Rural America, 1302 18th Street, NW, Suite 302, Washington, D.C 20036.

Rural American Women, 1522 K Street, Suite 700, Washington, D.C. 20005.

Southern Rural Development Center, P.O. Box 5406, Mississippi State University, Mississippi State, MI 39762.

Single Parents

Parent Support-Group Project, 294 Washington Street, Suite 630, Boston, MA 02108

Parents Without Partners, 7910 Woodmont Avenue, Suite 1000, Bethesda, MD 20814

Women

Girls Clubs of America National Resources Center, 41 W. Michigan Street, Indianapolis, IN 46202.

National Organization for Women, 425 13th Street, NW, Suite 723, Washington, D.C. 20004.

National Womens' Employment & Education, P.O. Box 959, 118 N. Broadway, Suite 622, San Antonio, TX 78294.

Vocational Education Equity Council, Affiliate of the American Vocational Association,
2020 N 145th Street, Arlington, VA 22201.

Women's Equity Action League, 805 15th Street, NW, Suite 822, Washington, D.C. 20005

Women's Information, Referral and Education Service, c/o Junior League of Boston,
117 Newbury Street, Boston, MA 02116

General Service Providers

Al-Anon Family Group Headquarters, One Park Avenue, New York, NY 10016

Alcoholics Anonymous World Service, P O Box 459, Grand Central Station, New York,
NY 10163.

American Civil Liberties Union, 132 W. 43rd Street, New York, NY 10036.

Chamber of Commerce of the U.S., 1615 H Street, NW, Washington, D.C. 20062.

International Planned Parenthood Federation, Western Hemisphere Region, Family Planning,
105 Madison Avenue, 7th Floor, New York, NY 10016.

National Alliance of Business, 1015 15th Street, NW Washington, D.C. 20005

National Association of Private Industry Councils, 2001 S Street, NW, Suite 500, Washington,
DC 20009.

National Association of Recovered Alcoholics, P.O. Box 95, Staten Island, NY 10305.

National Association on Drug Abuse Problems, 355 Lexington Avenue, New York, NY 10017.

National Career Development Association, 5999 Stevenson Avenue, Alexandria, VA 22304.

National Child Labor Committee, 1501 Broadway, Suite 1111, New York, NY 10036.

National Clearinghouse for Drug Abuse Information, National Institute of Drug Abuse,
Alcohol, and Mental Health Administration, 5600 Fishers Lane, Room 10-A53, Rockville,
MD 20857.

National Clearinghouse for Legal Services, 407 S. Dearborn, Suite 400, Chicago, IL 60605.

National Council on Alcoholism, 733 Third Avenue, New York, NY 10017.

National Legal Aid and Defender Association, 1625 K Street, NW, 5th Floor, Washington,
D.C. 20006.

Salvation Army, 799 Bloomfield Avenue, Verona, NJ 07044.

Second Harvest, The National Foodbank Network, 1001 N Central, Suite 303, Phoenix,
AZ 85004.

70001 LTC., 600 Maryland Avenue, SW, West Wing, Suite 300, Washington, D.C. 20024.

VD National Hotline, American Social Health Association, 260 Sheridan Avenue, Palo Alto, CA 94306

Work Incentive Program, 605 G Street, NW, Room 800, Washington, D.C. 20001.

Databases

Bilingual Education Bibliographic Abstracts. (BEBA) National Clearinghouse for Bilingual Education, Inter America Research Associates, 1555 Wilson Boulevard, Suite 605, Arlington, VA 22209.

The BEBA database covers bilingual/bicultural education and related topics, including linguistics, second language instruction, cultural and ethnic/linguistic minority groups. References are derived from technical reports, state-of-the-art reviews, conference papers, program descriptions, dissertations, unpublished manuscripts and classroom materials, in addition to books and journal articles.

Catalyst Resources for Women. (CRFW) Catalyst Information Center, 250 Park Ave., S., New York, NY 10033.

CRFW has resources about a variety of women's issues, especially career opportunities and work information for women.

DRUGINFO. Drug Information Service, College of Pharmacy, University of Minnesota, Minneapolis, MN 55455.

DRUGINFO consists of three interrelated databases. DRSC covers the educational, sociological, and psychological aspects of alcohol and drug use and abuse. HAZE contains information on alcohol use and abuse. DRUG is a combination of these two files.

Educational Resources Information Center. (ERIC) ERIC Processing and Reference Facility, 4833 Rugby Avenue, Suite 301, Bethesda, MD 20814

ERIC is sponsored by the Office of Educational Research and Improvement, U.S. Department of Education. It contains over half a million citations covering research findings, project and technical reports, speeches, unpublished manuscripts, books, and journal articles in the field of education. Educators, academicians, administrators and researchers will all find ERIC a key source for educational information.

ERIC Clearinghouse on Adult, Career, and Vocational Education. (ERIC/ACVE) The National Center for Research in Vocational Education, The Ohio State University, 1960 Kenny Road, Columbus, OH 43210-1090

ERIC/ACVE is one of 16 ERIC clearinghouses in the national information system. ERIC/ACVE offers several services and publications: help in preparing searches of various databases; information bulletins; Mini-Bibs, short bibliographies on topics of interest; ERIC Digests, summaries of information on selected topics; and packaged ERIC searches on high interest topics.

Educational Testing Service Test Collection. Educational Testing Service, Test Collection, Princeton, NJ 08541.

The collection contains current information on many types of tests used in education. Teachers, educational personnel, counselors, psychologists, and therapists will find the collection an ideal source for locating appropriate tests, evaluation tools, and assessment/screening devices to be used in measuring skills, aptitude, interests, attitudes, or achievement.

Exceptional Child Education Resources. (ECER) The Council for Exceptional Children, 1920 Association Drive, Reston, VA 22091.

ECER contains information on gifted and handicapped children. Included are published and unpublished books, journal articles, and reports. All aspects of the education of gifted and handicapped children are included.

Family Resources. National Council on Family Relations, 1910 West County Road B, Suite 147, St Paul, MN 55113.

This database is a comprehensive and authoritative source of bibliographic information on family-related literature. It encompasses interdisciplinary fields focusing on the family and related social sciences.

Ontario Education Resources Information. (ONED) Ontario Ministry of Education, Mowat Block, 13th Floor, Queens Park, Toronto, Ontario, Canada, MNA-1L2.

ONED contains educational information produced in Ontario such as research reports and curriculum guidelines. The database can be accessed through subject descriptors and material type, educational level, target population, funding source, and special features.

Resources in Computer Education. (RICE) Northwest Regional Educational Laboratory, 300 SW Sixth Avenue, Portland, OR 97204.

RICE is geared toward providing a reference and registry service for school districts, educational agencies, and other educational institutions. The database is comprised of various types of information on state-of-the-art educational computer applications. Citations include references to educational software packages and their producers, which feature detailed software and hardware requirement data, product descriptions and evaluations, information on intended end-user/audience, and further instructional information.

Resources in Vocational Education. (RIVE) The National Center for Research in Vocational Education, The Ohio State University, 1960 Kenny Road, Columbus, OH 43210-1090.

RIVE contains descriptions of projects that are federally funded and state-or federally administered. These projects are in the areas of curriculum development, research and development, and staff development. The citations include funding source and amount, fiscal year, project director, and sponsoring agency. Vocational educators and administrators, in addition to state and federal agencies, use RIVE to track projects, plan and evaluate programs, set priorities, and avoid duplication of activities.

Texas Education Computer Cooperative. (TECC) Texas Education Computer Cooperative, Statewide Microcomputer Courseware Evaluation Network, Region IV Education Service Center, P.O. Box 863, Houston, TX 77001.

TECC lists software for specific microcomputer systems and instructional needs. The descriptions of the software packages include system requirements, instructional characteristics, intended audience levels, costs, and detailed evaluations.

Vocational Education Curriculum Materials. (VECM) Curriculum Coordination Centers and the National Center for Research in Vocational Education, The Ohio State University, 1960 Kenny Road, Columbus, OH 43210-1090.

VECM contains records of current print and non-print vocational and technical education curriculum materials, including over 900 microcomputer courseware items in all areas of vocational education. Citations include sponsoring agency, educational level, intended user, student target population, and availability. A new feature of VECM is the Courseware Evaluation Network. Evaluations of microcomputer instructional software for vocational and technical education have been entered into VECM and ERIC. Availability information is supplied with each curriculum record

Electronic Services

ADVOCNET Adult, Vocational, and Technical Education Electronic Mail Network. The National Center for Research in Vocational Education, The Ohio State University, 1960 Kenny Road, Columbus, OH 43210-1090

ADVOCNET is a telecommunications system for adult, vocational, and technical educators. Services offered include electronic mail and electronic newswires. Electronic publications available are MEMO, a vocational education improvement newswire, PRODUCTS, a listing of new National Center products; VENTURE, a newswire focusing on entrepreneurship education; and EXCHANGE, a newswire for vocational education special needs

Partnerships Data Net, Inc. 1015 18th Street, NW, Suite 300, Washington, D.C. 20036.

Partnerships Data Net is a private, nonprofit corporation which assists in the development of collaboration among public and nonprofit voluntary organizations and agencies and the private sector. Services offered include access to databases, a national electronic network linking private sector and public organizations, electronic forums, electronic mail, electronic bulletin boards, teleconferencing, and news stories, wire services, and newsletter access

SpecialNet. 2021 K Street, NW, Suite 315, Washington, D.C. 20006.

SpecialNet is a national computer-based communication network for those interested in special education. All state agencies participate in it. Services offered include electronic mail, electronic bulletin boards, and data collection and information management. Some of the bulletin board services are federal government information, litigation information, employment opportunities, information exchange among users, news from *Education Daily*, lists of consultants, vocational education information, assessment instrument information, linkages with various professional organizations, information about conferences, and the opportunity for users to communicate among themselves.

Vocational Education Special Needs Exchange. The National Center for Research in Vocational Education, The Ohio State University, 1960 Kenny Road, Columbus, OH 43210-1090.

The Vocational Education Special Needs Exchange is a service designed to support vocational education special needs program improvement. The major activities include developing and maintaining a resource network of organizations that serve special needs populations; disseminating information of interest to the vocational education community; encouraging individuals and organizations to share their expertise and resources; encouraging announcement and use of special needs print and nonprint materials; and providing professional and leadership development opportunities. Services offered include an electronic newsletter (carried on ADVOCNET), a resource catalog, continuing professional development opportunities through the National Academy for Vocational Education, and various information services.

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